



Fire Station No. 2 Project

Initial Study – Mitigated Negative Declaration

prepared by

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prepared with the assistance of

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Initial Study

1. Proposed Project Title

Fire Station No. 2 Project

2. Lead Agency/Project Sponsor and Contact

Lead Agency/Project Sponsor

City of Seaside
440 Harcourt Avenue
Seaside, California 93955

Contact Persons

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3. Scope and Use of this Document

This Initial Study-Mitigated Negative Declaration (IS-MND) provides an assessment of the potential impacts to environmental resources that would result from constructing and operating the proposed Fire Station No. 2 Project (herein referred to as “proposed project” or “project”). The discussion and level of analysis are commensurate with the expected magnitude and severity of each impact. This document addresses environmental impacts related to construction and operation of the proposed fire station. The analyses in the following sections are based on technical reports and studies prepared for the proposed project, supplemented with other public information sources as provided in the list of references.

This document evaluates the potential for impacts to resource areas identified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. These resource areas include:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Mineral Resources
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation

- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Tribal Cultural Resources
- Utilities and Service Systems
- Tribal Cultural Resources
- Wildfire
- Mandatory Findings of Significance

4. Project Location and Physical Setting

Regional Location and Setting

The city of Seaside encompasses approximately nine square miles along Monterey Bay in northern Monterey County. Seaside is bordered by the city of Marina to the north; the former Fort Ord army installation and unincorporated Monterey County to the east; the cities of Del Rey Oaks and Monterey to the south; and Sand City and the Pacific Ocean to the west. Land uses in Seaside are mostly residential (approximately 66 percent by land area), with remaining land uses consisting of commercial, industrial, institutional and public uses, and vacant land (City of Seaside 2017). Seaside is regionally accessible via State Route (SR) 1, SR 68, and SR 218. The regional project location is shown in Figure 1.

Local Setting

The project site is in the northern portion of Seaside, northwest of Gigling Road and 1st Avenue on the southeastern portion of Assessor’s Parcel Number 031-151-012. The site is approximately six acres and is currently undeveloped. The project site is located within the area of the former Fort Ord military base. The project location is shown in Figure 2. Local vehicular access to the project site is primarily provided by SR 1, Lightfighter Drive, Gigling Road, and 1st Avenue.

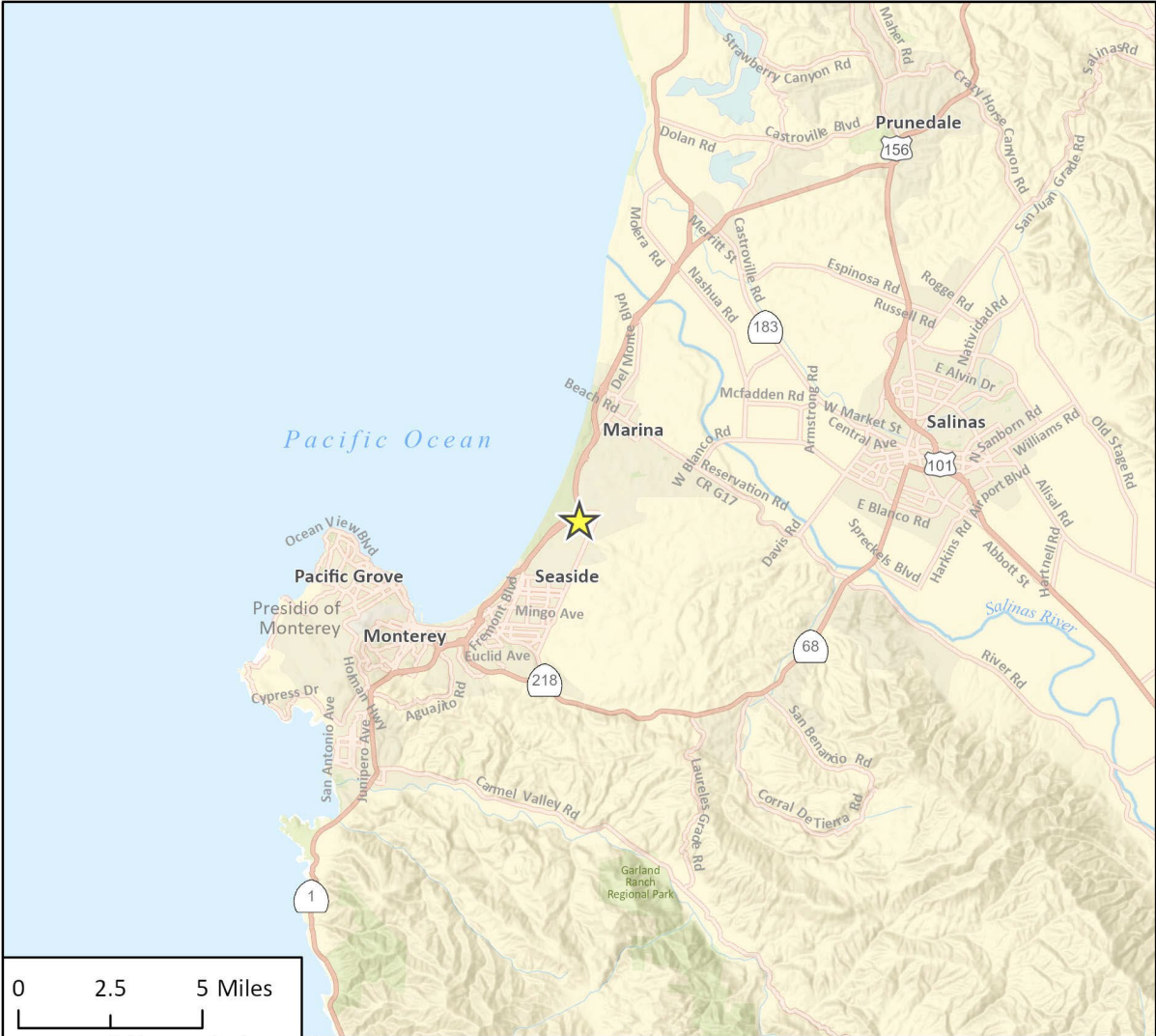
5. Surrounding Land Uses

Land uses surrounding the project site include open space and California State University – Monterey Bay campus to the north of Lightfighter Drive; a military community commissary to the east; military residential development to the south; and open space and SR 1 to the west. General Plan land use designations surrounding the project site include Park and Open Space to the north and west within Assessor’s Parcel Number 031-151-012; Military to the east; and Medium Density Residential to the south (City of Seaside 2004). Areas surrounding the project site are zoned Open Space – Recreation to the north and west within Assessor’s Parcel Number 031-151-012 and Military to the east and south (City of Seaside 2010).

6. General Plan Designation

The project site is currently designated as Parks and Open Space under the 2004 Seaside General Plan (City of Seaside 2004). The City of Seaside is in the process of updating its general plan (Seaside 2040), which, if adopted, would change the project site’s land use designation to Employment, which would allow for a range of employment and commercial uses with a maximum floor area ratio (FAR) of 2.5 (City of Seaside 2023).

Figure 1 Regional Location



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23-14076 CR
Fig 1 Regional Location

★ Project Location

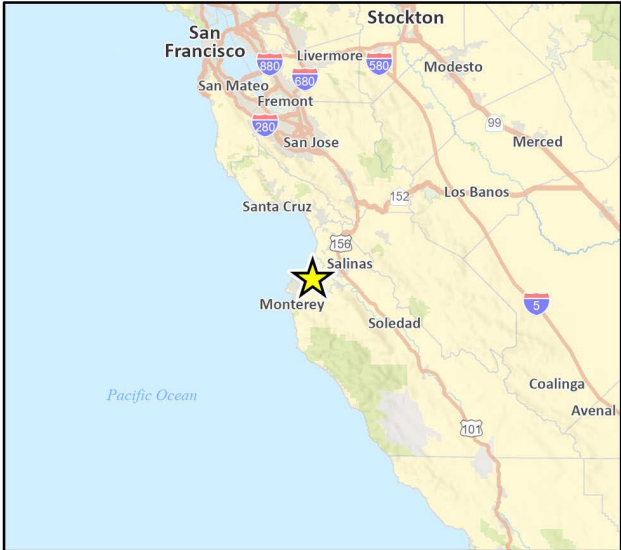
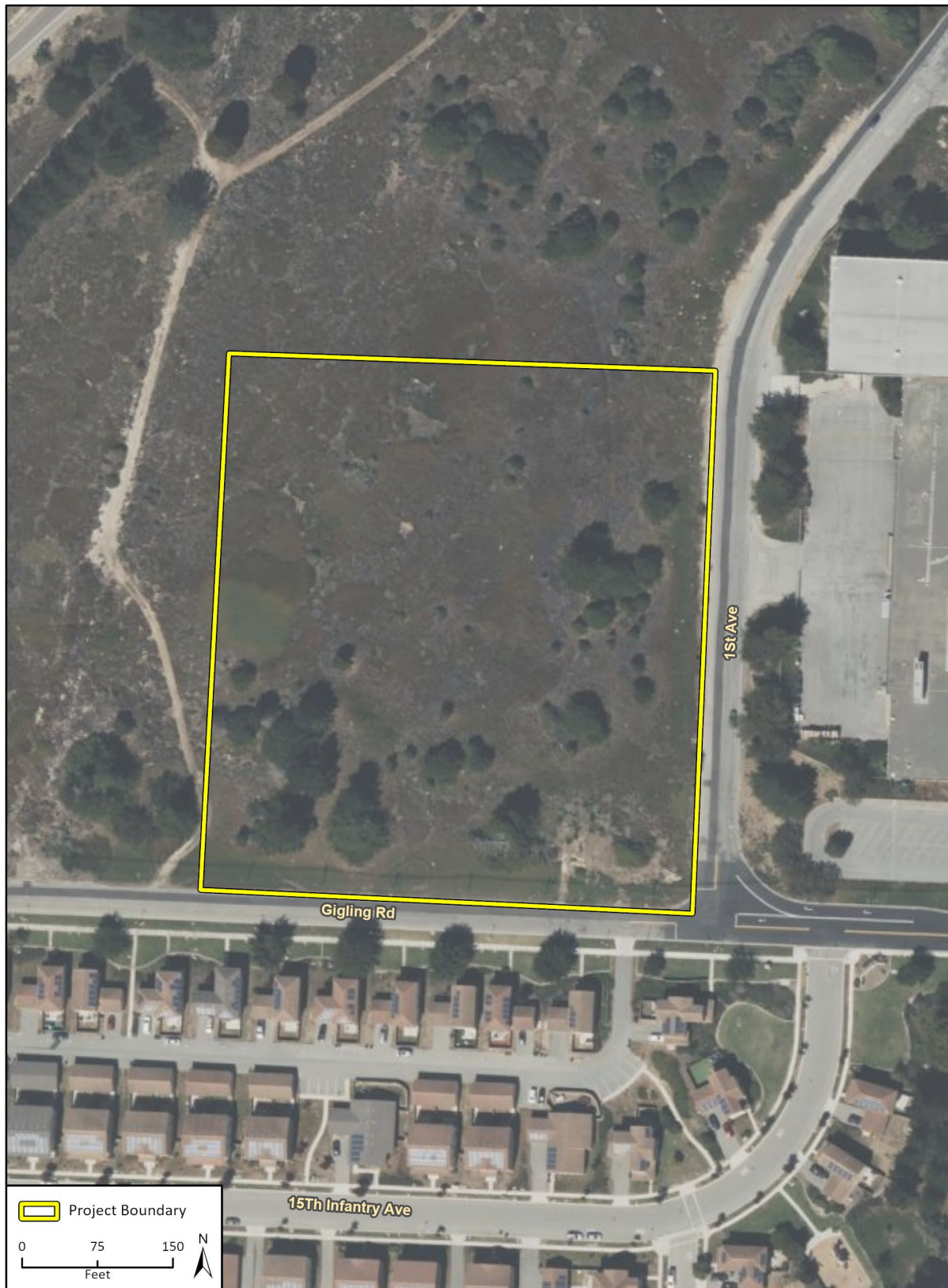


Figure 2 Project Location



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23-14076 EPS
Fig 2 Project Location

7. Zoning

The project site is zoned as Open Space – Recreation (City of Seaside 2010). Permitted uses within Open Space – Recreation zones include, but are not limited to, recreational trails, parks, and playgrounds. Public-serving uses, such as the proposed project, are conditionally permitted and require a Minor Use Permit.

8. Project Background

The City of Seaside has identified the need to construct a new fire station in northern Seaside to maintain fire protection services for existing development, and also to provide additional fire protection services to planned development in the northern portion of the city. Planned development in northern Seaside includes the Campus Town Specific Plan, which would facilitate the development of up to 1,485 housing units; 250 hotel rooms; 75 hostel beds; 150,000 square feet of retail, dining, and entertainment uses; 50,000 square feet of office, flex, makerspace, and light industrial uses; and parks and recreational uses on approximately 122 acres of former Fort Ord areas near the interchange of Lightfighter Avenue and SR 1. The Environmental Impact Report (EIR) prepared for the Campus Town Specific Plan, certified by the City in March 2020, identified the need for additional fire protection services to serve this development.

In 2021, the cities of Seaside and Marina jointly retained Citygate Associates to conduct a fire station location study. The study, completed in September 2021, identified the proposed project site as a preferred location for a new fire station for the City of Seaside. The study determined that a fire station at this location would improve response times and would provide greater access to the SR 1 corridor than other considered sites (Citygate Associates 2021). The project site is also immediately south of the Campus Town Specific Plan area, and a fire station in this location would better serve development facilitated by the Campus Town Specific Plan.

9. Project Description

The project would involve construction and operation of Fire Station No. 2, which would include an approximately 13,010-square foot fire station facility and 54,106 square feet of training facilities. The proposed fire station would include office, living, and general operations rooms and a 3,048-square foot covered apparatus bay with drive through access for both bays. Training areas would consist of a 54,000-square foot area, and would potentially include a future planned 3 to 4-story training tower. Site improvements would include a 2,300-square foot fire apparatus butler storage building, community and staff parking areas, internal driveways, sidewalks along the site frontage and throughout the site, patios, and landscaping. Proposed project plans are shown in Figure 3.

The project would involve subdivision of Assessor's Parcel Number 031-151-012 to create a new parcel that reflects the boundaries of the fire station. The new parcel would be zoned as Public/Institutional. The remainder of the parcel would remain as open space and is not a part of this project.

Key project features are described in greater detail below.

Figure 3 Project Plans



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23-14076 EPS
 Fig 3 Project Plan

Fire Station

The fire station would comprise firefighter living and working facilities and two apparatus bays that can house up to four fire apparatus depending on their size. The interior of the fire station would contain a community reception area and bathrooms, a community room, offices for firefighters, police department report writing room, a day room, exercise room, dining area, kitchen, firefighter bedrooms and bathrooms, utility, mechanical, and medical supply storage rooms. A community patio and public parking would be located outside the fire station to the north, and a private patio, outdoor workout space, and firefighter parking would be located to the west. The apparatus bay, accessible from the fire station to the south, would provide 3,048 square feet of covered emergency vehicle space; two bathrooms; decontamination room; laundry room; personal protective equipment room and a hose storage room; a workshop; and a self-contained breathing apparatus fill room. The proposed features of the fire station are summarized in Table 1, and the proposed project plans are shown in Figure 3.

Table 1 Summary of Fire Station Features

Feature	Area (square feet)
Fire Station	
Firefighter dormitories	1,080
Firefighter facilities	1,620
Community space and offices	1,708
Mechanical/Storage	524
Apparatus Bay	
Emergency vehicle bay	2,880
Firefighter facilities	381
Mechanical/Storage	1,143
Storage/Secondary Dorm	1,660
Total Fire Station Area	13,010
Numbers do not sum as listed areas do not include hallways or areas outside of rooms	

Training Area

The proposed project would include a training area in the northwestern portion of the project site, encompassing approximately 54,106 square feet. The training area would include a vehicle extrication area, space for a National Fire Protection Association vehicle driving course, roof prop, draft pit, door props, and two additional prop structures for training activities. The training area is sized to accommodate up to 5 fire engines and 20 firefighters at one time. A training tower may be added to the training area in a future project phase. The tower would be located near the center of the training area, and be up to 4 stories in height. Multiple fire hydrants and at least one fire department connection would be located on the site.

Other Project Components

The project would include construction of a 2,300 square-foot storage building near the southwest corner of the project site, which would be used for apparatus storage. The project would also include construction of a trash enclosure, storage/battery building, and electricity main in the

southwest corner near Gigling Road. The project would also include a fueling station and emergency back-up generator, located near the training area.

Site Access and Improvements

Sidewalks, Driveways, and Parking

A sidewalk would be constructed along the project frontage on 1st Avenue and Gigling Road. Along 1st Avenue, the sidewalk would connect to the public parking area and would provide access to the main entrance to the fire station, the community patio on the east side of the project site, and to the community room within the fire station. Internal walkways would also be constructed west of the fire station near the center of the project site and would provide access to the fire station staff parking lot, the staff patio and workout patio, and the training area in the northern portion of the project site.

The project would include the construction of three new driveways; two with access from 1st Avenue and one with access from Gigling Road. One driveway on 1st Avenue would be located at the northeastern corner of the project site and would provide access to 18 public parking spaces north of the fire station. A total of eight electric vehicle-capable parking spaces, two electric vehicle chargers, two accessible parking spaces, and two bicycle parking spaces would be provided. The second driveway on 1st Avenue would be an egress-only driveway for emergency vehicles from the apparatus bay for travel in either direction on 1st Avenue. The third driveway, on Gigling Road near the southwest corner of the project site, would provide ingress to the apparatus bay and 14 staff parking spaces. This driveway would have a gate, and the staff parking spaces would be covered with solar panel structures. The internal driveway from the staff parking area would provide access to the training area.

Landscaping and Stormwater Controls

Site preparation would involve the removal of existing vegetation within the project site, including approximately 30 mature trees. Pursuant to Seaside Municipal Code (SMC) Section 8.54.060, 30 trees of a size and species satisfactory to the City's architectural review board would be planted in the project site to replace the removed trees.

The project would include ornamental landscaping along the project site's frontage with Gigling Road and the installation of bioretention areas. The bioretention areas would have a combined area of approximately 3,800 square feet and the capacity to treat and infiltrate 3,300 cubic feet of stormwater. The bioretention areas are sized to infiltrate the 95th percentile storm. Paved areas of the proposed project, including the three driveways, parking areas, and training area, would be gently sloped so that stormwater associated with new impervious surfaces would be directed to the bioretention areas. Pursuant to SMC Section 18.02.070, the project would be required to maintain or enhance on-site stormwater infiltration and would retain 100 percent of runoff on-site.

Construction

Project construction would occur over approximately 13 months from August 2024 to September 2025. The project would be constructed in five phases, outlined in Table 2 and described further below.

Table 2 Proposed Construction Schedule

Construction Phase	Duration	Approximate Start and End Dates
Site Preparation (completed in two phases)	30 days 30 days	August – September 2024 May – June 2025
Grading	10 months	September 2024 - June 2025
Building Construction	10 months	December 2024 - September 2025
Asphalt Paving	4 months	June - September 2025
Paving/Architectural Coating	6 months	March - September 2025

Construction work would occur Monday through Friday, from approximately 7:00 a.m. to 4:00 p.m. Weekend construction is not anticipated. Construction equipment would be staged on site, and workers would also park on site. Grading would result in approximately 3,500 cubic yards of cut, approximately 10,500 cubic yards of native fill, and approximately 1,500 cubic yards of imported select fill. Haul trucks would use 1st Avenue, Gigling Road, and Lightfighter Drive to transport soil material to the Monterey Peninsula Landfill, which is located approximately seven miles north of the site, or another location as determined by the construction contractor.

Operation

In operation, the fire station would have the capacity to accommodate up to eight (8) full-time firefighters to provide fire protection service to the city of Seaside. The training facility would allow Seaside Fire Department to conduct in house and countywide training activities. The fire station would be operational full time, initially staffed with a minimum of 3 full time firefighters but up to an additional 5 firefighters.

The training area of the proposed project would accommodate training activities for current and prospective firefighters and would be used for vehicle extrication training with the use of gas-powered tools, driver training, and hose drills. A training tower would potentially be added to the training area of the proposed fire station in a future project phase. Training activities associated with the tower would include live fire training, emergency access and rescue training, and evacuation training.

10. Cumulative Projects Scenario

For purposes of CEQA cumulative impacts analysis, the cumulative projects scenario would include the construction and operation of the proposed project in addition to construction and operation of the following projects proposed within the project vicinity:

- Development facilitated by the Campus Town Specific Plan
- Development facilitated by the California State University – Monterey Bay Campus Master Plan
- The Seaside Resort – Enclave at Cypress Cove
- The Projects at Main Gate
- Fort Ord Regional Trail and Greenway project
- Parker Flats Apartments project

Projects included in the cumulative projects scenario and cumulative impacts are discussed in detail in Environmental Checklist Section 21, *Mandatory Findings of Significance*.

11. Assembly Bill 52 and Senate Bill 18 Consultation

On April 12, 2023, the City of Seaside sent letters to representatives of tribes initiating Assembly Bill 52 (AB 52) consultation, including the Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Esselen Tribe of Monterey County, Indian Canyon Mutsun Band of Costanoan, Ohlone/Coastanoan-Esselen Nation, Wuksache Indian Tribe/Eshom Valley Band, Kakoon Ta Ruk Band of Ohlone-Costanoan Indians of the Big Sur Rancheria, and Rumsen Am:a Tur:ataj Ohlone.

On April 12, 2023, the City of Seaside also sent letters to representatives of tribes initiating Senate Bill 18 (SB 18) consultation, including the Amah Mutsun Tribal Band, Amah Mutsun Tribal Band of Mission San Juan Bautista, Costanoan Rumsen Carmel Tribe, Esselen Tribe of Monterey County, Indian Canyon Mutsun Band of Costanoan, Ohlone/Coastanoan-Esselen Nation, Wuksache Indian Tribe/Eshom Valley Band, Kakoon Ta Ruk Band of Ohlone-Costanoan Indians of the Big Sur Rancheria, and Rumsen Am:a Tur:ataj Ohlone.

Additional detail regarding responses and recommendations of tribal representatives is included in Environmental Checklist Section 18, *Tribal Cultural Resources*.

12. Required Approvals

The project would require the following approvals and permits from the City and other agencies.

Table 3 Summary of Potentially Required Approvals

Regulating Agency	Permit/Approval
City of Seaside	Adoption of IS-MND
	Approval of Minor Use Permit
	Approval of the project grading and building permits
	Approval of the parcel subdivision and General Plan Amendment for the land use change (note a General Plan Amendment would only be required if Seaside 2040 is not adopted prior to approval of this project)
Central Coast Regional Water Quality Control Board	National Pollutant Discharge Elimination System permit coverage and approval of Stormwater Pollution Prevention Plan
Monterey Bay Air Resources District	Permit for stationary backup generator

Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is “Potentially Significant” or “Less than Significant with Mitigation Incorporated” as indicated by the checklist on the following pages.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Energy |
| <input type="checkbox"/> Geology/Soils | <input type="checkbox"/> Greenhouse Gas Emissions | <input type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population/Housing | <input type="checkbox"/> Public Services |
| <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation | <input type="checkbox"/> Tribal Cultural Resources |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “less than significant with mitigation incorporated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

- I find that although the proposed project could have a significant effect on the environment, because all potential significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Signature

Carolyn Burke

Printed Name

FEBRUARY 12, 2024

Date

Assistant Public Works Director

Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Except as provided in Public Resources Code Section 21099, would the project:

a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. *Would the project have a substantial adverse effect on a scenic vista?*

For the purposes of this analysis, scenic vistas are considered viewpoints that offer expansive/panoramic views of a large geographic area, for the benefit of the public. They can be associated with a dramatic change in elevation, but they can also be from an undeveloped flat area toward features, such as mountains or the ocean, in the distance. The city includes scenic views of the Pacific Ocean, Monterey Bay, Roberts Lake, and rolling hills in northern and eastern Seaside (City of Seaside 2004). The Bay is not visible from the vicinity of the project site due to existing trees on the berm adjacent to SR 1 and topographic variation. Brief views of hills on Monterey Peninsula are visible from 1st Avenue near the project site, however these views are not expansive or panoramic. Views of the Bay and surrounding hills from viewpoints in the vicinity of the project site would not be obstructed by new buildings on the project site due to topographic variation as well as existing intervening structures and vegetation. Though the up to 4-story training tower would be taller than the buildings in the project site vicinity, the tower would be narrow and would not substantially block views given the tower’s small footprint. Given the gentle slope change across the project site,

the lack of expansive and panoramic views, and the lack of views of a large geographic location, the project site is not considered to have scenic vistas. As such, the project would not have a substantial adverse effect on a scenic vista, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The western border of the project site is located approximately 800 feet from northbound lanes of the SR 1 highway. While SR 1 is eligible for designation as a State scenic highway, the segment closest to the project site has not been officially designated as such (Caltrans 2018). Furthermore, an existing berm and landscaping along the eastern side of SR 1 obstructs views of the project site from the highway. This landscaping consists of tall, thick mature trees that block the project site from view. The project would not have an impact on views from SR 1 as the view from the highway would not change. The mature trees that line the eastern side of SR 1, while within the same parcel as the proposed project, are not located within the project site and would not be removed as part of the project. Approximately 30 trees may be removed from the project site during grading and construction; however, many are in poor health and would be replaced at a 1:1 ratio pursuant to SMC Section 8.54.070. These removals would not be visible from SR 1. In addition, the project site does not contain rock outcroppings or historic buildings. Therefore, the project would not damage scenic resources within a state scenic highway. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?*

According to California Public Resource Code Section 21071, an area is an “urbanized area” if the population of a city is at least 100,000 persons or if the city and not more than two contiguous cities’ population combined equals at least 100,000 persons. Seaside, Marina, and Monterey combined populations are less than 100,000 persons. As such, the project site is in a non-urbanized area.

Although the project would develop open space for Public/Institutional uses, proposed development would be visually consistent with surrounding developed areas. Surrounding uses include the Ord Community Commissary to the east and residential development to the south. These buildings are one to two stories in height. The proposed fire station would be located adjacent to these uses, and would be visually consistent with the developed nature of adjacent land. Though the up to 4-story training tower would be taller than the buildings in the project site vicinity, the tower would be narrow and would have a small footprint. Therefore, this would not constitute a change that would be considered as substantial degradation of the existing character or visual quality of the project site and its surroundings. The remainder of the parcel would be kept as undeveloped open space. In addition, the project would undergo review by the Board of Architectural Review to evaluate the character, quality, scale, and architectural relationship with the

site and other structures. Therefore, the project would not substantially degrade the existing visual character or quality of the site or surrounding area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The project site is adjacent to developed areas located to the south and the east which contain light and glare typical of such areas, including exterior and security lights associated with the residences and Ord Commissary, streetlights, headlights, parking lot lights, and reflective surfaces such as windows. Flashing lights from emergency apparatus leaving the project site would light surrounding areas; however, these lights would be fleeting and not a permanent disturbance for surrounding areas. The project would include exterior glass surfaces and outdoor lighting. The project would be subject to the City's Zoning Ordinance (SMC Chapter 17.30, *Standards for all Development and Land Uses*) regulating the maximum height of freestanding outdoor light fixtures, position, maximum illumination, and other parameters of lighting fixtures throughout the City. These measures would minimize glare by confining glare and reflections within the boundaries of the site and ensure light sources are not visible from off the site by using properly directed and fully shielded fixtures. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. *Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The project site is designated as Other Land by the California Department of Conservation Farmland Mapping and Monitoring Program (DOC 2023a). The project site is not designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, and is not currently used for agriculture. There would be no impact.

NO IMPACT

- b. *Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

The project site is zoned Open Space – Recreation and would require a Minor Use Permit for development in this zone. The site and surrounding area is not zoned for agricultural use or subject to a Williamson Act contract (County of Monterey 2023). Accordingly, the project would not conflict with existing zoning for agricultural use or a Williamson Act contract. There would be no impact.

NO IMPACT

- c. *Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)); timberland (as defined by Public Resources Code Section 4526); or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?*
- d. *Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

The project site and surrounding area is not zoned for forest land, timberland, or timberland production (City of Seaside 2010). Though tree removal would be required for the project, there are no dense tree canopies on the site. The site is not considered forest land and is not managed as a forest. Therefore, the project would not impact timberland or forest land and there would be no impact.

NO IMPACT

- e. *Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?*

The project site is vacant and surrounding areas are largely developed and do not contain designated farmland, forest land, or lands used or zoned for agriculture. As a result, implementation of the proposed project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest uses. There would be no impact.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for “criteria pollutants” and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory, etc.) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic gases (ROG),¹ nitrogen oxides (NO_x), particulate matter with diameters of ten microns or less (PM₁₀) and 2.5 microns or less (PM_{2.5}), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created by atmospheric chemical and photochemical reactions primarily between VOC and NO_x. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.

¹ CARB defines VOC and ROG similarly as, “any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate,” with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROG and VOC are considered comparable in terms of mass emissions, and the term VOC is used in this IS-MND.

Fire Station No. 2 Project

- Area sources are widely distributed and include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles.

Air Quality Management

The California Clean Air Act requires each air district with jurisdiction over a nonattainment area in the state to adopt a plan showing how the CAAQS for the ozone will be met. Most recently, the Monterey Bay Air Resources District (MBARD) adopted the 2012-2015 Air Quality Management Plan (2015 AQMP) to demonstrate a pathway for the region to make progress toward meeting the ozone CAAQS. Reducing NO_x emissions is crucial for reducing ozone formation and given that the primary sources of NO_x emissions are mobile sources, the 2015 AQMP primarily includes measures to reduce NO_x emissions, focusing on on-road and off-road vehicles.

Air Pollutant Emission Thresholds

The MBARD (2008) *CEQA Air Quality Guidelines* provide a list of construction and operational air pollutant emissions thresholds as well as a list of mitigation measures to incorporate in circumstances where emissions are above applicable thresholds.

Table 4 presents MBARD's project-level significance thresholds for construction and operational criteria air pollutant and precursor emissions. These represent levels at which a project's individual emissions of criteria air pollutants or precursors would result in a cumulatively considerable contribution to the North Coast Central Air Basin's existing air quality conditions. For the purposes of this analysis, the project would result in a significant impact if construction or operational emissions from the project would exceed the thresholds shown in Table 4.

Table 4 Air Quality Thresholds of Significance

Pollutant	Source	Threshold of Significance
Construction Impacts		
PM ₁₀	Direct	82 lbs/day ¹
Operational Impacts		
VOC	Direct and Indirect	137 lbs/day
NO _x	Direct and Indirect	137 lbs/day
PM ₁₀	On-site	82 lbs/day ²
CO	N/A	LOS at intersection/road segment degrades from LOS D or better to LOS E or F or V/C ratio at intersection/road segment at LOS E or F increases by 0.05 or more or delay at intersection at LOS E or F increases by 10 seconds or more or reserve capacity at unsignalized intersection at LOS E or F decreases by 50 or more
	Direct	550 lbs/day
SO _x , as SO ₂	Direct	150 lbs/day

lbs/day = pounds per day; PM₁₀ = particulate matter with a diameter of 10 microns or less; VOC = volatile organic compounds (also referred to as ROG, or reactive organic gases); NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = oxides of sulfur; SO₂ = sulfur dioxide; LOS = level of service, V/C = volume-to-capacity

¹ This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM₁₀ emissions may occur if a project uses equipment that is not “typical construction equipment” as specified in Section 5.3 of the MBARD (2008) *CEQA Air Quality Guidelines*.

² MBARD’s operational PM₁₀ threshold of significance applies only to on-site emissions, such as project-related vehicle trips along on-site unpaved roads. Source: MBARD 2008

Methodology

Air pollutant emissions generated by project construction and operation were estimated using the California Emissions Estimator Model (CalEEMod) version 2022.1.1.14. CalEEMod uses project-specific information, including the project’s land uses, location, and construction parameters, to model construction emissions. The analysis reflects the construction of the project as described under Initial Study Section 9, *Project Description*.

Construction emissions modeled include emissions generated by construction equipment used on-site and emissions generated by vehicle trips associated with construction, such as worker, vendor, water truck, and haul trips. Construction of the proposed project was analyzed based on the construction schedule and construction equipment list provided by the project’s engineering and design team. Construction would begin in August 2024 and occur over the course of approximately 13 months with work occurring Monday through Friday. The project would be constructed in five phases: site preparation, grading, building construction, asphalt paving, and architectural coating. It is assumed all construction equipment would be diesel-powered. Grading would result in approximately 3,500 cubic yards of cut, approximately 10,500 cubic yards of native fill, and approximately 1,500 cubic yards of imported select fill.

Operational emissions modeled include emissions generated by vehicles and apparatus use associated with the fire station, as well as area uses such as energy, water and wastewater, and landscaping. Additionally, the project would involve the burning of natural gas or propane for fire training activities. If required by MBARD, the Fire Department would obtain applicable burn permits for this use.

The carbon monoxide (CO) thresholds provided by MBARD are designed to screen out projects from further analysis that would have a less than significant impact to CO; however, projects that exceed these screening thresholds would not necessarily result in a hotspot. Localized CO concentrations are primarily the result of the volume of cars along a road and the level of emissions generated by vehicles; restricted vehicular traffic flows can contribute to higher volumes of vehicles on a given roadway in a period of time, but are not the cause of high CO concentrations. Stringent vehicle emission standards in California have reduced the level of CO emissions generated by vehicles over time such that CO hotspots are rarely a concern, except for roadways with very high traffic volumes. Because MBARD only provides screening thresholds for CO hotspot impacts but does not have a standard for assessing whether a project's CO hotspot impacts would be significant, the CO threshold from the Bay Area Air Quality Management District (BAAQMD), which is the air district immediately adjacent to MBARD to the north, is utilized in this analysis. BAAQMD has established a volume of 44,000 vehicles per hour as the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017). The NCCAB and the San Francisco Bay Area Air Basin (the jurisdiction of the BAAQMD, which is the air district immediately adjacent to MBARD to the north) are both in attainment for the CAAQS and NAAQS for CO and have not reported exceedances of the CO standard at local monitoring stations for the last two decades (BAAQMD 2017). Therefore, given the similar ambient air quality conditions for CO in both air basins, it is appropriate to use the BAAQMD threshold in this analysis.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

A project would conflict with or obstruct implementation of the 2015 AQMP if either it induced population such that the population of Seaside exceeds the population forecast for the appropriate five-year increment utilized in the 2015 AQMP or if construction and operational emissions of ozone precursors would exceed MBARD significance thresholds (MBARD 2008).

The proposed project would involve construction and operation of a new fire station intended to serve existing and planned development in Seaside. Because the fire station is intended to serve development in northern Seaside, particularly development facilitated by the Campus Town Specific Plan (adopted March 2020), the project would not result in future unplanned development. The project would not directly generate population growth through construction of housing. As discussed further in Environmental Checklist Section 14, *Population and Housing*, the proposed fire station would house up to eight full time personnel, and this small number of employees would not be considered a substantial indirect increase in population growth. Therefore, the project would not directly or indirectly induce population growth such that the population of Seaside would exceed the population forecast utilized in the 2015 AQMP.

MBARD states construction projects using typical construction equipment that temporarily emit precursors of ozone (VOCs and NO_x) are accommodated in the emission inventories of state and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone NAAQS or CAAQS (MBARD 2008). The project would involve the use of typical construction equipment; as such, construction-related emissions of VOCs and NO_x would be less than significant. MBARD also states a project would contribute substantially to a violation of NAAQS or CAAQs if it would emit 82 lbs/day or more of PM₁₀ (MBARD 2008). PM₁₀ emissions from construction of the project would not exceed MBARD thresholds as shown in Table 5 under criterion (b) below. Therefore, the proposed project would not conflict with or obstruct the implementation of the applicable air quality plan, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?*

Construction Emissions

Construction activities such as site preparation, grading, construction worker travel to and from the project site, delivery and hauling of construction materials and debris to and from project site, and fuel combustion by on-site construction equipment would generate emissions of ozone precursors (ROG and NO_x), carbon monoxide, and fugitive dust (PM₁₀ and PM_{2.5}). According to the MBARD guidelines, PM₁₀ is typically the greatest pollutant of concern during construction.

The MBARD (2008) *CEQA Air Quality Guidelines* provide project-level thresholds for construction emissions. If a project's construction emissions fall below the project-level thresholds, the project's impacts to regional air quality are considered individually and cumulatively less than significant. Table 5 shows the estimated maximum daily emissions for each year of project construction. As shown therein, project construction would generate maximum daily PM₁₀ emissions of approximately 13 lbs/day, which is well below the MBARD threshold of 82 lbs/day. In addition, MBARD states construction projects using typical construction equipment that temporarily emit precursors of ozone (VOCs and NO_x) are accommodated in the emission inventories of state and federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone NAAQS or CAAQS (MBARD 2008). The project would involve the use of typical construction equipment; as such, construction-related emissions of VOCs and NO_x would be less than significant. Therefore, project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be less than significant.

Table 5 Estimated Maximum Daily Construction Emissions (lbs/day)

Construction Year	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
2024	5.7	54	53	<0.1	13	7.6
2025	7.5	60	64	0.1	13	7.7
MBARD Thresholds	N/A	N/A	N/A	N/A	82 ¹	N/A
Threshold Exceeded?	N/A	N/A	N/A	N/A	No	N/A

lbs/day = pounds per day; VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; N/A = not applicable

¹ This threshold only applies if construction is located nearby or upwind of sensitive receptors. In addition, a significant air quality impact related to PM₁₀ emissions may occur if a project uses equipment that is not "typical construction equipment" as specified in Section 5.3 of the MBARD *CEQA Guidelines* (2008).

Notes: All numbers have been rounded to the nearest whole number. Emissions modeling was completed using CalEEMod. See Appendix A for modeling results.

Although construction-related air quality impacts would be less than significant, MBARD recommends the use of the following best management practices for the control of short-term construction emissions (MBARD 2008). These measures were not included in the modeling in order to provide a more conservative estimate of air pollutant emissions. However, the City requires the following MBARD-recommended best management practices as a standard condition of approval, which would further reduce air pollutant emissions.

Condition of Approval

AQ-1 MBARD Best Management Practices

- Water all active construction areas at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.
- Prohibit all grading activities during periods of high wind (over 15 miles per hour)
- Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days)
- Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed areas
- Maintain at least two feet of freeboard on haul trucks
- Cover all trucks hauling soil, sand, and other loose materials
- Plant vegetative ground cover in disturbed areas as quickly as possible
- Cover inactive storage piles
- Sweep streets if visible soil material is carried out from the construction site
- Post a publicly visible sign that specifies the telephone number and person to contact regarding dust complaints. This person shall respond to complaints and take corrective action within 48 hours. The phone number of the MBARD shall be visible to ensure compliance with Rule 402 (Nuisance)
- Limit the area under construction at any one time

Operational Emissions

Operation of the project would generate trips to and from the project site, operation of fire apparatus, and generation of air pollutant emissions associated with building power and fire training activities. Table 6 summarizes the project's maximum annual operational emissions by emission source and maximum daily operational emissions.

As shown in Table 6, operational emissions would be well below the MBARD regional thresholds for criteria pollutants. Therefore, project operation would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard, and impacts would be less than significant.

Table 6 Estimated Operational Emissions

Source	Emissions (pounds per day)					
	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Mobile Emissions	<1	<1	2	<0.01	<1	<0.1
Area Emissions	<1	<0.1	<1	<0.01	<0.01	<0.01
Energy Emissions	<0.1	<0.1	<0.1	<0.01	<0.1	<0.1
Project Emissions	<1	<1	2	<0.01	<1	<0.1
MBARD Threshold	137	137	550	150	82	N/A ¹
Threshold Exceeded?	No	No	No	No	No	N/A

VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO₂ = sulfur dioxide; PM₁₀ = particulate matter with a diameter of 10 microns or less; PM_{2.5} = particulate matter with a diameter of 2.5 microns or less; N/A = not applicable
Notes: All numbers have been rounded to the nearest tenth. Emissions presented are the highest of the winter and summer modeled emissions. Numbers may not add up due to rounding.

¹ The MBARD does not have a significance threshold for operational PM_{2.5} emissions.

Source: See Appendix A for CalEEMod calculations and assumptions.

LESS THAN SIGNIFICANT IMPACT

c. *Would the project expose sensitive receptors to substantial pollutant concentrations?*

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Therefore, most sensitive receptor locations are schools, hospitals, and residences. Sensitive receptors in the project vicinity include residences located immediately south of the project site.

The project would have a significant impact if construction would generate toxic air contaminants (TACs) that exceed health risk significance thresholds, or if the project would result in a CO hotspot which would exceed ambient air quality standards.

Toxic Air Contaminants

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for demolition, site preparation, trenching, infrastructure installation, paving, and other construction activities. DPM was identified as a TAC by CARB in 1998 (CARB 2022b).

Generation of DPM from construction projects typically occurs in a single area for a short period of time. Construction of the proposed project would occur in phases over approximately 13 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period. However, young children are more sensitive to exposure to some carcinogens than adults. Therefore, the California Office of Environmental Health Hazard Assessment has implemented age sensitivity factors that consider the increased sensitivity of children during early development stages (i.e., 3rd trimester exposure to 16 years). Given the age

sensitivity factors, exposure at a young age to even short term projects have the potential to result in substantial risk exposure.

The maximum daily PM₁₀ emissions would range from 5.7 to 7.5 lbs/day of exhaust (DPM), with the maximum emissions occurring during grading. The proposed project would be consistent with the applicable AQMP requirements and control strategies intended to reduce emissions from construction equipment and activities. The proposed project would also comply with the CARB Air Toxics Control Measure that limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle Regulation. Compliance with these requirements would minimize emissions of TACs during construction. However, given the construction area's proximity to nearby sensitive receptors, including residences on the opposite side of Gigling Road, impacts from TACs could be potentially significant. Implementation of Mitigation Measure AQ-2 would reduce potential impacts to a less than significant level.

The project would not include any mobile or stationary sources of air pollution once operational. Therefore, impacts related to TAC emissions from stationary sources would be less than significant.

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above a carbon monoxide ambient air quality standard. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local carbon monoxide concentration exceeds the federal one-hour standard of 35.0 ppm or the federal and state eight-hour standard of 9.0 ppm (CARB 2022a). As discussed under *Methodology*, the CO threshold from BAAQMD is utilized in this analysis because MBARD only provides screening thresholds for CO hotspot impacts. BAAQMD has established a volume of 44,000 vehicles per hour as the level above which traffic volumes may contribute to a violation of CO standards (BAAQMD 2017).

As shown in the Transportation Analysis prepared by Central Coast Transportation Consulting (Appendix B), the project would generate a maximum of 62 trips per day when training activities are taking place. The number of daily trips generated by the project would generally be lower when training activities are not occurring. Existing traffic volumes for roadways near the project site are shown below in Table 7 (City of Seaside 2019).

Table 7 Daily Trips on Area Roadways

Roadway	Peak AM Hour Trips	Peak PM Hour Trips
1st Avenue	14	14
Lightfighter Drive	82	185
Gigling Road	77	76

Source: City of Seaside 2019

As shown above, none of the roadways surrounding the project site experience traffic volumes of 44,000 vehicles per hour. The project would generate a maximum of 62 trips per day and would not result in area roadways experiencing more than 44,000 vehicles per hour. Therefore, the project would not substantially contribute to the exceedance of NAAQS and CAAQS for CO. The project would not expose sensitive receptors to substantial concentrations of CO and impacts related to CO hotspots would be less than significant.

Mitigation Measure

AQ-2 Construction Emissions Reduction

The following measures shall be noted on construction plans and implemented during construction:

- All mobile off-road equipment (wheeled or tracked) greater than 50 horsepower used during construction activities shall meet the USEPA Tier 4 interim standards. Tier 4 certification can be for the original equipment or equipment that is retrofitted to meet the Tier 4 interim standards.
 - Alternative Fuel (natural gas, propane, electric, etc.) construction equipment shall be incorporated where available. These requirements shall be incorporated into the contract agreement with the construction contractor. A copy of the equipment's certification or model year specifications shall be available upon request for all equipment on-site.

Significance After Mitigation

With incorporation of Mitigation Measure AQ-2, the project would be required to use off-road diesel-powered construction equipment that meets or exceeds the most stringent and environmentally protective CARB and USEPA Tier 4 off-road emissions standards, or alternatively fueled equipment which would substantially reduce DPM emissions. The Tier 4 standards reduce DPM emissions by approximately 81 to 96 percent as compared to equipment that meet the Tier 2 off-road emissions standards, depending on the specific horsepower rating of each piece of equipment. Thus, with implementation of Mitigation Measure AQ-2, construction activities would not expose sensitive receptors to substantial TAC concentrations that would potentially exceed cancer risk greater than ten per one million population. Construction-related health impacts would be reduced to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- d. *Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

During construction activities, temporary odors would be generated by vehicle exhaust and construction equipment. Construction-related odors would be short-term and would cease upon completion. In addition, MBARD Rule 402 prohibits the discharge of air contaminants or other emissions that would cause a nuisance or detriment to a considerable number of persons or to the public, with the exception of odors from agricultural activities. Compliance with Rule 402 is required and would further reduce construction odor impacts. Therefore, project construction would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

Land uses typically producing odorous emissions include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (MBARD 2008). The project would include construction and operation of a fire station. Minor quantities of odorous emissions may be released during fire training activities. However, emissions would be temporary and limited to the immediate vicinity of the training area within the project site. Therefore, project operation would not result in other emissions (such as those leading to odors) adversely affecting a substantial number of people, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Regulatory authority over biological resources is shared by federal, State, and local authorities under a variety of statutes and guidelines. Primary authority for general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Seaside). The California Department of Fish and Wildlife (CDFW) is a trustee agency for biological resources throughout the State under CEQA and also has direct jurisdiction under the California Fish and Game Code (CFGF). Under the California and federal Endangered Species Acts, CDFW and the United States Fish and Wildlife Service (USFWS) also have direct regulatory authority over species formally listed as threatened or endangered and species protected by the Migratory Bird Treaty Act (MBTA).

The following information and analysis is based primarily on the Biological Resources Assessment (BRA) prepared for the project by Rincon Consultants, Inc. (Rincon), which is included as Appendix C. As part of the BRA, Rincon conducted a field reconnaissance survey of the project site in April 2023 and botanical surveys in April 2023 and June 2023.

Setting

Special Status Plant Species

Based on the database and literature review performed for the BRA (Appendix C), eight special status plant species are known to occur or have at least moderate potential to occur within the vicinity of the project site. The June 2023 botanical survey determined that three of these species do not occur within the project site: Fort Ord spineflower, robust spineflower, and northern curly-leaved monardella. The fourth species, Monterey spineflower, was observed in the project site during the April 2023 field reconnaissance survey and confirmed as present during the June 2023 botanical survey. Gowen cypress, Monterey cypress, and Monterey pine also occur in the project site; however, these trees do not occur in natural stands, and as such, these individuals are not considered special status.

Special Status Wildlife Species

38 special-status wildlife species were evaluated for their potential to occur within the project site, and five species were found to have potential to occur (Appendix C). The remaining 33 species could be eliminated based on the species-specific habitat requirements and lack of suitable habitat such as perennial streams and rivers, native maritime chaparral and coastal dune habitats, large open grasslands, and connectivity with natural areas. Additionally, native birds have the potential to nest within the project site. Species determined to have some potential to occur within the project site include:

- Western bumble bee and Crotch bumble bee
- Northern California legless lizard
- Ferruginous hawk
- White-tailed kite
- Nesting birds

Sensitive Natural Communities and Critical Habitat

Monterey cypress, Gowen cypress, and some coast live oak alliances are considered sensitive when occurring in natural stands or woodlands; however, no naturally occurring vegetation alliances are present, and there are few naturally occurring stands of these species in Seaside, particularly

Monterey cypress. There are no naturally occurring stands of Gowen cypress in Seaside. Historical aerial imagery shows no trees were present in the project site before 1956, and the spacing of the large Monterey cypress indicates they may have been planted (Appendix C). Therefore, individuals present within the project site are likely ornamental plantings or offspring established or recruited from ornamental plantings and would not be considered sensitive.

There are no potentially jurisdictional water features within the project site. The project site is not within Essential Connectivity Areas or Natural Landscape Blocks (CDFW 2023) and does not provide connectivity for local wildlife movement as it is surrounded by development to the south and east, with SR 1 adjacent to the project site parcel to the northwest. The project site is not within the area of a Habitat Conservation Plan or Natural Community Conservation Plan, but is within former Fort Ord lands designated for development under the Fort Ord Habitat Management Plan (HMP) and 2017 USFWS Biological Opinion (BO) (Appendix C).

Seaside Municipal Code

SMC Chapter 8.54, Trees, provides standards for the removal, protection, and preservation of trees, defined as having a single trunk and a height of 10 feet or more, or has a circumference of 20 inches measured at 24 inches above the ground. The ordinance requires a tree removal permit and replacement plantings for any tree to be removed during project construction. In addition to requiring tree removal permits, the ordinance also requires measures to protect existing trees during project construction.

- a. *Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

Special-status Plant Species

The project site is known to contain Monterey spineflower, a federally-threatened species. Monterey spineflower is located in the northwestern portion of the project site, within the proposed training area. The BSA is located within former Fort Ord parcels designated for development under the HMP and USFWS BO; however, the HMP and BO do not include coverage for “take” of listed species. The HMP and BO require identification of special-status species that may be salvaged for restoration in habitat reserve areas. Construction and operation of the proposed project could result in potentially significant impacts to Monterey spineflower through direct removal of individual plants. Consultation with USFWS and preparation of a salvage and relocation plan would be required. To reduce potentially significant impacts to Monterey spineflower, Mitigation Measures BIO-1(a) and BIO-1(b) would also be required. With approval of the salvage plan obtained from USFWS, and Mitigation Measures BIO-1(a) and BIO-1(b), impacts to Monterey spineflower would be less than significant.

Special-status Wildlife Species

Impacts to western bumble bee, Crotch bumble bee, ferruginous hawk, and white-tailed kite foraging habitat due to development would be small given the size of the project site and low potential for these species to occur. Impacts to these species would be less than significant. However, if Northern California legless lizard is present in the soil during construction activities, individuals may be impacted through vibration and noise disturbance or direct mortality. Given the

small size of the project site, impacts on a population level are not expected; however, impacts to individuals during construction may be significant. In addition, construction could result in injury, harm, or mortality to nesting birds, if present at the site during construction. Construction disturbance could also result in nest abandonment and failure. These impacts would be potentially significant. Implementation of Mitigation Measures BIO-1(c), BIO-1(d), and BIO-1(e) would be required and would reduce impacts to special-status wildlife species to less than significant.

Mitigation Measures

BIO-1(a) Monterey Spineflower Avoidance and Minimization

Wherever possible the project layout shall be redesigned to avoid impacting those plants. Monterey spineflower that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits shall be demarcated as an Environmentally Sensitive Area (ESA) and shall have bright orange protective fencing installed a minimum of 30 feet beyond their extent prior to and during construction activities. Reduction of avoidance buffer distance shall be approved by a qualified biologist. No construction activity shall be allowed within these avoidance areas. To avoid encroachment within ESAs, the limits of work shall be clearly shown on all project plans and demarcated on-site with high-visibility fencing. Work near such ESAs shall be monitored by a qualified biologist to ensure no encroachment occurs. For impacts to Monterey spineflower plants that cannot be avoided, Mitigation Measure BIO-1(b) shall be implemented.

BIO-1(b) Habitat Mitigation and Monitoring Plan

If all Monterey spineflower individuals cannot be avoided, habitat restoration or compensatory mitigation shall be required at a minimum ratio of 1:1 for occupied habitat area. Additionally, because Monterey spineflower is a federally-listed plant species, USFWS will likely require a restoration plan to be submitted for their review in support of federal and/or State incidental take authorization(s). Accordingly, a habitat mitigation and monitoring plan (HMMP) shall be prepared by a qualified biologist and submitted to the City for review and approval prior to issuance of grading permits. The HMMP shall include, at a minimum, the following components:

- Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type)
- Goal(s) of the compensatory mitigation project [type(s) and area(s) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved]
- Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values)
- Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan)
- Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule)
- Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports)
- Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type

- An adaptive management program and remedial measures to address any shortcomings in meeting success criteria and/or to address catastrophic events, such as wildfires
- Notification of completion of compensatory mitigation and agency confirmation
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism)

BIO-1(c) Worker Environmental Awareness Program

Prior to initiation of construction activities (including staging and mobilization), the project proponent shall arrange for all personnel associated with project construction for the applicable phase to attend Worker Environmental Awareness Program (WEAP) training, conducted by a City-approved biologist, to aid workers in recognizing special-status resources that may occur in the construction area. The specifics of this program shall include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees shall sign a form provided by the trainer indicating they have attended the WEAP training and understand the information presented to them. The form shall be submitted to the City to document compliance.

BIO-1(d) California Legless Lizard Pre-construction Survey and Relocation

A pre-construction clearance survey for Northern California legless lizard shall be conducted by a City-approved qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The survey shall cover the entire disturbance footprint plus a minimum 200-foot buffer, where permissible, and should identify all special-status animal species that may occur on the project site. If Northern California legless lizards are identified, individuals shall be relocated by a qualified biologist to suitable cover with loose soils a minimum of 500 feet from the project site, as accessible.

BIO-1(e) Pre-construction Nesting Birds Surveys and Avoidance Buffers

Ground disturbance and vegetation removal activities shall be restricted to the non-breeding season for birds (September 16 to January 31), when feasible. For ground disturbance and vegetation-removal activities occurring during the bird nesting season (February 1 to September 15), general pre-construction nesting bird surveys shall be conducted by a qualified biologist not more than 14 days prior to construction activities involving ground clearing, vegetation removal/trimming, or building demolition. The surveys shall include the disturbance area plus a 200-foot buffer around the site if feasible and a 500-foot buffer for raptors. If active nests are located, an appropriate avoidance buffer shall be established within which no work activity would be allowed that would impact these nests. The avoidance buffer shall be established by the qualified biologist on a case-by-case basis based on the species and site conditions. In no case shall the buffer be smaller than 50 feet for non-raptor bird species, or 200 feet for raptor species. Larger buffers may be required depending on the status of the nest and the construction activities occurring near the nest. The buffer area(s) shall be closed to all construction personnel and equipment until juveniles have fledged and until the nest is inactive. A City-approved biologist shall confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer. If there are delays in on-

site activities for more than 14 days during the breeding season, an additional survey shall be required prior to the start of work.

Significance After Mitigation

Implementation of Mitigation Measure BIO-1(a) and BIO-1(b) would minimize impacts to Monterey spineflower, avoidance, demarcation, and restoration if necessary. Implementation of Mitigation Measures BIO-1(c) through BIO-1(e) would similarly minimize potential impacts to special-status species through preliminary detection and implementation of avoidance, minimization, and mitigation measures. Overall, implementation of these measures would reduce project impacts to special-status plant and wildlife species to a less than significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

There are no sensitive natural communities or riparian habitats listed by CDFW within the project site. No impact would occur.

NO IMPACT

- c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?*

There are no jurisdictional water features within the project site. No impacts to wetlands or waters would occur.

NO IMPACT

- d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?*

There are no corridors for wildlife movement within the project site. The project site is enclosed by residential and commercially developed areas to the south and east, and the project site parcel is bounded by SR 1 to the northwest. The site is further isolated by development within the greater vicinity, within the cities of Seaside and Marina. There would be no impact to wildlife movement.

NO IMPACT

- e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

The project would remove 30 trees, including one Gowen cypress, one Monterey pine, three Monterey cypress, and 25 coast live oaks. The City's Municipal Code (Chapter 8.54) requires a tree removal permit and replacement plantings at a 1:1 ratio (Appendix C). The project proponent would plant 30 replacement trees of a size and species satisfactory to the City's architectural review board. As many replacement trees would be planted on site as possible; however, some replacement trees may be planted in the undeveloped portion of the parcel surrounding the project site or other areas of Seaside. With City approval of the project landscaping plan, indicating the size, species, and

location of replacement trees, there would be no conflict with local policies or ordinances. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The site is within former Fort Ord lands designated for development under the HMP and USFWS BO. There are no restrictions on development for this parcel under the HMP, and with consultation with USFWS for impacts to Monterey spineflower, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section provides an analysis of the project’s impacts on cultural resources, including historical and archaeological resources as well as human remains. This section is primarily based on the Cultural Resources Assessment prepared by Rincon in November 2023, which is included as Appendix D.

CEQA requires that a lead agency determine whether a project may have a significant effect on historical resources (Public Resources Code [PRC] Section 21084.1). A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript a lead agency determines to be historically significant (*CEQA Guidelines* Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (PRC Section 21083.2[a-b]). PRC Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

The impact analysis included here is organized based on the cultural resources thresholds included in *CEQA Guidelines* Appendix G: Environmental Checklist Form. Threshold A broadly refers to historical resources. To differentiate between archaeological and built environmental resources more clearly, the analysis under Threshold A is limited to built environment resources.

Archaeological resources, including those that may be considered historical resources pursuant to Section 15064.5 and those that may be considered unique archaeological resources pursuant to Section 21083.2, are considered under Threshold B.

Methodology and Results of Cultural Resources Assessment

Rincon conducted a cultural resources investigation and analysis of the project site. This analysis included a cultural resources records search of the California Historical Resources Information System at the Northwest Information Center (NWIC), located at California State University, Sonoma, and a Native American Heritage Commission (NAHC) Sacred Lands File (SLF) search. Rincon also conducted a pedestrian survey of the project footprint for all locations as part of the study and prepared a cultural resources assessment covering the entirety of the proposed project (Appendix D).

The NWIC records search was performed to identify previously conducted cultural resources studies, as well as previously recorded cultural resources within the project site and a one-mile radius surrounding it. The records search included a review of available records at the NWIC, as well as the National Register of Historic Places (NRHP), the CRHR, the Office of Historic Preservation Historic Properties Directory, the California Inventory of Historic Resources, the Archaeological Determinations of Eligibility list, and historical maps. The NWIC records search identified 21 cultural resources studies conducted within a 0.5 mile radius of the project site, one of which evaluated portions of the project site.

On April 24, 2023, Rincon Cultural Resources Specialist Laura Maldonado, MA, RPA, performed a pedestrian field survey of the project site. A supplemental survey was conducted on October 26, 2023, to ensure that the entire project site had been surveyed after minor changes to the project footprint. The pedestrian survey was conducted by walking a series of north/south oriented transects spaced no more than 10 meters (approximately 30 feet) apart within the project site. The project site was examined for evidence of artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discolorations that might indicate the presence of cultural midden, soil depressions, and features indicative of the former presence of structures of buildings (e.g., standing exterior walls, postholes, foundations) or historical debris (e.g., metal, glass, ceramics). No archaeological or built environment resources were identified during the field survey.

- a. *Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?*

As discussed above, the project site does not contain built environment historical resources. Therefore, the project would have no impact on historical resources of the built environment.

NO IMPACT

- b. *Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?*

As discussed above, the NWIC records search and background research identified 21 previously recorded cultural resources within a one-mile radius of the project site, one of which overlaps with portions of the project site. This cultural resource record describes a prehistoric occupation site located at an unspecified location somewhere on the 28,000-acre former Fort Ord military base. The site was destroyed by a bulldozer in 1940. The location of this resource is unknown (Appendix D).

The Cultural Resources Assessment did not identify archaeological resources or archaeological deposits in the project site. The absence of substantial prehistoric or historic-period archaeological remains within the immediate vicinity, along with the geologic context of the project site, suggest there is a low potential for encountering intact subsurface archaeological deposits. However, the lack of surface evidence of archaeological materials does not preclude their subsurface existence, and it is always possible that unknown buried archaeological resources could be encountered during project ground disturbance, which could cause a substantial adverse change in the significance of an archaeological resource. The City requires Condition of Approval CR-1 for the potential discovery of unanticipated cultural resources. This Condition of Approval includes procedures for the appropriate handling of unanticipated discoveries of cultural resources. Implementation of Condition of Approval CR-1 would ensure that potential impacts to archeological resources are less than significant.

Condition of Approval

CR-1 Unanticipated Discovery of Cultural Resources

If archaeological resources are unexpectedly encountered during ground-disturbing activities, work within 50 feet of the find shall halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for Archaeology (NPS 1983) shall be contacted immediately to evaluate the resource. If the resource is determined by the qualified archaeologist to be prehistoric, then a Native American representative from the Ohlone/Costanoan-Esselen Nation (OCEN) shall also be contacted to participate in the evaluation of the resource. If no OCEN-approved Native American representative is available, then the Native American representative shall be from another locally affiliated Tribe. If the qualified archaeologist and/or Native American representative determines it to be appropriate, archaeological testing for CRHR eligibility shall be completed. If the resource proves to be eligible for the CRHR and significant impacts to the resource cannot be avoided via project redesign, a qualified archaeologist shall prepare a data recovery plan tailored to the physical nature and characteristics of the resource, per the requirements of the California Code of Regulations guidelines Section 15126.4(b)(3)(C). The data recovery plan shall identify data recovery excavation methods, measurable objectives, and data thresholds to reduce any significant impacts to cultural resources related to the resource. Pursuant to the data recovery plan, the qualified archaeologist and Native American representative, as appropriate, shall recover and document the scientifically consequential information that justifies the resource's significance. The City shall

review and approve the treatment plan and archaeological testing as appropriate, and will seek input from OCEN prior to plan approval. The resulting documentation shall be submitted to the regional repository of the CHRIS, per California Code of Regulations Section 15126.4(b)(3)(C).

LESS THAN SIGNIFICANT IMPACT

- d. Would the project disturb any human remains, including those interred outside of formal cemeteries?

The discovery of human remains is always a possibility during ground disturbing activities, which would be required for the proposed project. In addition to being potential archaeological resources, human burials have specific provisions for treatment in PRC Section 5097. Additionally, California Health and Safety Code Sections 7050.5, 7051, and 7054 contain specific provisions for the protection of human burial remains. Existing regulations address the illegality of interfering with human burial remains and protects them from disturbance, vandalism, or destruction. PRC Section 5097.98 also addresses the disposition of Native American burials, protects such remains and establishes the NAHC as the entity to resolve any related disputes.

If human remains are found, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to PRC Section 5097.98. In the event of an unanticipated discovery of human remains, the County coroner must be notified immediately. If the human remains are determined to be prehistoric, the coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access to the site and may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. Due to required compliance with PRC Section 5097.98 and California Health and Safety Code Section 7050.5, impacts to human remains would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

As a state, California is one of the lowest per capita energy users in the United States, ranked 48th in the nation, due to its energy efficiency programs and mild climate (United States Energy Information Administration 2022). The project would only require the usage of petroleum fuels for construction activities and maintenance trips. Therefore, petroleum fuels are the focus of this analysis.

Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (United States Energy Information Administration 2022). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with approximately 12.5 billion gallons sold in 2020 (California Energy Commission 2022). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 2.9 billion gallons sold in 2020 (California Energy Commission 2022).

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with the project's energy consumption are discussed in detail in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 8, *Greenhouse Gas Emissions*, respectively.

- a. *Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

Construction

The project would require site preparation, fire station construction, paving, and architectural coating. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to transport materials to and from the site. As shown in Table 8, project construction would require approximately 2,608 gallons of gasoline and approximately 76,761 gallons of diesel fuel. These construction energy estimates are

conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 8 Estimated Fuel Consumption during Construction

Source	Fuel Consumption (gallons)	
	Gasoline	Diesel
Construction Equipment & Water Truck/Hauling Trips	--	76,761
Construction Worker Vehicle Trips	2,608	--

See Appendix E for energy calculation sheets.

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful, and unnecessary use of energy during construction, and impacts would be less than significant.

Operation

Operation of the project would contribute to regional energy demand by consuming electricity and gasoline and diesel fuels. Electricity would be used for heating and cooling systems, lighting, appliances, and water and wastewater conveyance, among other purposes. Gasoline and diesel consumption would be associated with vehicle trips generated by visitors and fire department staff. Table 9 summarizes estimated operational energy consumption for the proposed project.

Table 9 Estimated Project Annual Operational Energy Consumption

Source	Energy Consumption ¹	
Transportation Fuels		
Gasoline	4,821 gallons	529 MMBtu
Diesel	1,064 gallons	136 MMBtu
Electricity	0.32 GWh	1,087 MMBtu

MMBtu = million metric British thermal units; GWh = gigawatt-hours

¹ Energy consumption is converted to MMBtu (millions of British thermal units) for each source

See Appendix E for energy calculation sheets and Appendix A for CalEEMod output results for electricity usage.

As shown in Table 9 above, project operation would require approximately 4,821 gallons of gasoline and 1,064 gallons of diesel for transportation fuels, and 0.32 GWh of electricity. Vehicle trips associated with future workers, visitors, and deliveries would represent the greatest operational use of energy associated with the proposed project.

The project would receive power from Central Coast Community Energy (3CE), the region’s community-choice energy program which provides energy from primarily renewable sources. The project would also be required to comply with all standards set in the latest iteration of the California Building Standards Code (California Code of Regulations Title 24), which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. California’s CalGreen standards (California Code of Regulations Title 24, Part 11) require implementation of energy-efficient light fixtures and building materials into the design of new construction projects. Further, the 2022 Building Energy Efficiency Standards (California Code of Regulations Title 24, Part 6) require newly constructed buildings to meet energy performance standards set by the California Energy Commission. These standards are specifically crafted for new buildings to result in energy efficient performance so that the buildings do not result in wasteful, inefficient, or unnecessary consumption of energy. Pursuant to CalGreen, all plumbing fixtures used for the proposed project would be high-efficiency fixtures, which would minimize the potential inefficient or wasteful consumption of energy related to water and wastewater. Additionally, the project would include solar panels in the covered parking lot, which would generate energy on-site.

Therefore, the project would not result in potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during construction or operation. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. *Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

Goals and policies of the City’s 2004 General Plan related to energy would apply to the project. Additionally, the City is in the process of updating its General Plan. The project’s consistency with the existing 2004 General Plan and, for informational purposes, the proposed Seaside 2040 General Plan are shown below in Table 10. As shown therein, the project would be consistent with applicable policies of the 2004 General Plan and the proposed Seaside 2040 General Plan. Impacts would be less than significant.

Table 10 Consistency with 2004 Seaside General Plan and Proposed Seaside 2040 Energy-Related Goals and Policies

Seaside General Plan Goal/Policy	Discussion
2004 General Plan	
<p>Policy LU-4.1. Require that all new development: 1) funds its share of community services and facilities (e.g. parks, roads, trails, and utilities); 2) uses quality design and materials; and 3) is compatible with surrounding uses, the site, and available infrastructure.</p> <p>Implementation Plan LU-4.1.1 Land Use Compatibility Checklist item 8: The project includes water and energy conservation features in its design and landscaping.</p>	<p>Consistent. As described in Initial Study Section 9, <i>Project Description</i>, and under criterion (a) above, the project would include high-efficiency landscaping, plumbing, light fixtures, and appliances as required by the 2022 Building Energy Efficiency Standards. Therefore, the project would be consistent with this policy.</p>
<p>Goal COS-7. Encourage energy conservation.</p> <p>Policy COS-7.1. Participate in local, regional, and State programs that promote energy conservation.</p> <p>Implementation Plan COS-7.1.1. Title 24 Construction Standards. Enforce State Title 24 building construction requirements and apply standards that promote energy conservation.</p>	<p>Consistent. The project would receive power from 3CE, the region’s community-choice energy program which provides energy from primarily renewable sources. Additionally, the project would comply with the requirements of Title 24 construction standards, as described under criterion (a) above. Therefore, the project would be consistent with this goal, policy, and implementation plan.</p>

Seaside General Plan Goal/Policy	Discussion
<p>Implementation Plan COS-7.1.2. Energy Conservation in Public Buildings. Implement energy conservation measures in public buildings through the following actions:</p> <ul style="list-style-type: none"> ▪ Promote energy efficient buildings and site design for all new public buildings during the site development permit process; and ▪ Install energy saving devices in new public buildings and retrofit existing public buildings. 	<p>Consistent. The project would include high-efficiency landscaping, plumbing, light fixtures, and appliances as required by the 2022 Building Energy Efficiency Standards. Therefore, the project would be consistent with this implementation plan.</p>
Proposed Seaside 2040 General Plan	
<p>Goal HSC-9. Energy efficient buildings that use energy from renewable sources.</p> <p>Policy: Renewable energy. Encourage the installation of renewable energy generation sources in the design and development of new development to reduce energy costs and support resource conservation.</p>	<p>Consistent. The project would receive power from 3CE, which provides energy from primarily renewable sources. Additionally, solar panels would be installed over the staff parking lot, which would generate energy on site. Therefore, the project would be consistent with this goal and policy.</p>
<p>Goal HSC-11. New construction that meets a high-level of environmental performance.</p> <p>Policy: CalGreen. Ensure future development meets the mandatory elements of CalGreen.</p> <p>Policy: Sustainable building practices. Encourage innovative sustainable building practices when homes are renovated and new buildings are constructed.</p> <p>Policy: Passive solar techniques. Encourage new development to reduce building energy use by:</p> <ul style="list-style-type: none"> ▪ Maximizing interior daylighting. ▪ Using cool exterior siding, roofing, and paving materials with relatively high solar reflectivity to reduce solar heat gain. ▪ Planting shade trees of south- and west-facing sides of new buildings to reduce energy loads. 	<p>Consistent. The project would include high-efficiency landscaping, plumbing, light fixtures, and appliances as required by the 2022 Building Energy Efficiency Standards. Additionally, solar panels would be installed over the staff parking lot, which would generate energy on site. Therefore, the project would be consistent with this policy.</p>

Source: City of Seaside 2004, 2023

LESS THAN SIGNIFICANT IMPACT

7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

A Geotechnical Investigation was completed for the project to assist in evaluating geologic and soil impacts. The field study and subsequent report were completed by Pacific Crest Engineering, Inc. and is included in Appendix F. The report details the results of test borings conducted to determine soil properties and provides recommendations regarding potential geotechnical hazards and construction on the site.

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Fault rupture can occur along or immediately adjacent to faults during an earthquake. Fault rupture is characterized by ground cracks and displacement which could endanger life and property. Damage is typically limited to areas close to the moving fault.

There are no active or inactive faults that cross the project site, and the site is not located within an Earthquake Fault Zone designated by the state under the Alquist-Priolo Earthquake Fault Zoning Act (DOC 2023b). As such, the proposed project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault. This impact would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

Ground shaking effects are also the result of an earthquake, but the impacts can be widespread. Although a function of earthquake intensity, ground shaking effects can be magnified by the underlying soils and geology, which may amplify shaking at great distances. It is difficult to predict the magnitude of ground shaking following an earthquake, as shaking can vary widely within a relatively small area.

Active faults in the region include the Monterey Bay-Tularcitos Fault, located approximately 6 miles south of the project site, and the San Andreas Fault, located approximately 20 miles northeast of the project site (USGS 2023). Strong ground shaking associated with major earthquakes along these nearby faults could occur at the project site. Collapse or partial collapse of buildings during seismic shaking could result in injury or death of building occupants. Potential structural damage and the exposure of people to the risk of injury or death from structural failure could occur.

These risks would be minimized by compliance with California Building Code (CBC) engineering design and construction measures, which require foundations and other structural support features to resist or absorb damaging forces from strong ground shaking. Although nothing can ensure that proposed structures do not fail under seismic stress, proper engineering can minimize the risk to life and property.

SMC Section 15.04.020 adopts by reference the 2016 CBC. SMC Section 15.32.090 (D) states that recommendations included in engineering reports when approved by the city engineer shall be incorporated in the plans and specifications. The Geotechnical Investigation (Appendix F) included recommendations for the project's general earthwork, foundations, slab-on-grade construction, retaining walls, structural pavement, surface drainage, stormwater infiltration, and erosion control. Compliance with the CBC and incorporation of the seismic and soil stability measures recommended in the Geotechnical Investigation (Appendix F) would ensure that the project would not directly or

indirectly cause potential substantial adverse effects involving strong seismic ground shaking. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*
- a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*
- c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?*

Liquefaction and lateral spreading most often occur in loose saturated silts, and saturated poorly graded fine-grained sands. The project site is located in an area of low potential for liquefaction, and thus a low potential for lateral spreading, because the soils are well-drained, and groundwater was not encountered during the field investigation (Appendix F). In addition, there is a low potential for earthquake-induced landslides because of the relatively flat to gentle sloping (Appendix F). The soils underlying the site have the potential for settlement or some subsidence, but not collapse, during a strong seismic event. This hazard can be reduced by over excavating the loose surficial soils and bringing the building pad up to design grades with engineered fill (Appendix F). Therefore, the project site has a low potential for liquefaction, lateral spreading, and landslides, and a moderate potential for settlement, subsidence, and collapse during strong seismic events. The proposed project would involve grading and excavation that would level portions of the project site. As described under *criterion a.2*, SMC Section 15.32.090 (D) requires the implementation of recommendations from project geotechnical reports. Appendix F provides a comprehensive list of design recommendations, including foundation design, site preparation and grading, and drainage, which would be implemented as part of project design and construction. With the inclusion of the recommendations included in the geotechnical investigation, impacts related to liquefaction, lateral spreading, subsidence, collapse, or landslides would not directly or indirectly cause potential substantial adverse effects. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project result in substantial soil erosion or the loss of topsoil?*

Surface soils on the project site are classified as having a high potential for erosion (Appendix F). Construction activities that disturb one or more acres of land are subject to the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No. 2012-0006-DWQ) adopted by the State Water Resources Control Board (SWRCB). Compliance with the NPDES permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a stormwater pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

Compliance with the Construction General Permit is reinforced through the SMC in Chapter 15-32, *Standards to Control Excavation, Grading, Clearing and Erosion*. Further, SMC Section 15.32.180 contains design standards for erosion and sediment control related to slopes, runoff control, building site runoff, vegetation removal, vegetation disposal, topsoil, temporary vegetation, winter operations, dust, erosion control coordination with project installation; and Section 15.32.070 requires permit applications to include vegetation erosion control and revegetation measures for all surfaces exposed or expected to be exposed during grading activities as part of overall erosion and sediment control plans (City of Seaside 2017). The project would be required to comply with these requirements and standards, which would reduce erosion impacts.

Compliance with the Construction General Permit and SMC would ensure that the project would not result in substantial soil erosion or the loss of topsoil. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- d. *Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?*

The project site and surrounding areas are underlain by one soil type, Oceano loamy sand 2 to 15 percent slopes (United States Department of Agriculture 2023). The Oceano series consists of deep, excessively drained soils that formed in material weathered from sandy eolian deposits (United States Department of Agriculture 2023). Expansive soils are typically very fine-grained with a high to very high percentage of clay. The soils underlying the project site have a low shrink-swell potential (Appendix F). Areas characterized by low shrink-swell potential do not pose a geologic hazard due to expansion.

Compliance with existing State and local laws and regulations, such as the CBC and City Municipal Code, would ensure that potential impacts would be minimized. SMC Section 15.32.090 (D) requires the submittal and review of detailed soils and/or geologic reports prior to construction, which would ensure risks from expansive soil would be minimized.

Because the project would not be located on expansive soils, and pursuant to compliance with the CBC and SMC, the project would not create substantial direct or indirect risks to life or property due to expansive soil. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

Wastewater from the project would be collected and conveyed into the existing Marina Coast Water District (MCWD) conveyance system. Wastewater discharged to MCWD's sanitary sewer system is ultimately pumped to the Monterey One Water Regional Wastewater Treatment Plant. The project would not require the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

NO IMPACT

- g. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Paleontological resources, or fossils, include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows). Paleontological resources are contained within the geologic deposits or bedrock that underlies the soil layer, and occur in a non-continuous and often unpredictable distribution. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore determine the potential for construction-related impacts to occur.

According to the Society of Vertebrate Paleontology (SVP; 2010) classification system, geologic units can be assigned a high, low, undetermined, or no potential for containing scientifically significant nonrenewable paleontological resources. This criterion is based on rock units within which vertebrate or significant invertebrate fossils have been determined by previous studies to be present or likely to be present. The potential for impacts to significant paleontological resources is based on the potential for ground disturbance to directly impact paleontologically sensitive geologic units.

The project site is located in the Coast Ranges geomorphic province, one of the eleven geomorphic provinces of California (California Geological Survey 2002). The Coast Ranges extend along the majority of California's coast from the California-Oregon border to Point Arguello in Santa Barbara County in the south and consist of northwest-trending mountain ranges and valleys. The Coast Ranges are composed of Mesozoic and Cenozoic sedimentary, igneous, and metamorphic strata. The eastern side is characterized by strike-ridges and valleys in the Upper Mesozoic strata. The Coast Ranges province runs parallel to and overlaps the San Andreas Fault in some areas (California Geological Survey 2002). Locally, the project is found on the coastal plain south of the Salinas River estuary approximately one mile inland of the coastline of Monterey Bay.

The geology of the region surrounding the project was mapped by Dibblee and Minch (2007) and Wagner et al. (2002), who identified a single geologic unit, Quaternary old dune sand, underlying the project site. The geotechnical investigation conducted for the project did not encounter any sediments that obviously pertain to another geologic unit in its test borings that reached up to 51.5 feet below the surface (Pacific Crest Engineering 2023). Quaternary old dune sand consists of Pleistocene-aged, well-sorted eolian sand (Dibblee and Minch 2007). Pleistocene dune deposits rarely, though do, preserve fossils in California (Ahlbrandt et al. 1978; Jefferson 2010; Reynolds 2004). These fossils have consisted of horse (*Equus*), deer (*Odocoileus*), rodents, birds, amphibians, fish, and invertebrates. However, due to the rarity of such localities, Quaternary old dune sand has low paleontological sensitivity.

Rincon requested a records search from the University of California Museum of Paleontology on April 12, 2023. This search recovered no known fossil localities within the project site (Holroyd 2023). The nearest known Pleistocene-aged fossil locality to the project site is from the City of Salinas, approximately eight miles east of the project site, where alluvial (i.e., non-eolian) sediments occur (Wagner et al. 2002).

Ground-disturbing activities within previously undisturbed sediments could result in significant impacts to paleontological resources if they result in the destruction, damage, or loss of scientifically important paleontological resources or their associated stratigraphic and paleontological data. A single geologic unit with low paleontological sensitivity, Quaternary old dune sand, is mapped at the surface within the project site. This project would require up to 3,500 cubic yards of excavation, and although Quaternary old dune sand has low paleontological sensitivity, there are a few known fossil

localities from similar sediments in California (Ahlbrandt et al. 1978; Jefferson 2010; Reynolds 2004). With a large volume of sediment being excavated, it is possible that paleontological resources could be encountered during construction, which could result in significant impacts to these resources if they are not evaluated and, if scientifically significant, salvaged by a qualified paleontologist. The City requires Condition of Approval GEO-1 for the potential discovery of paleontological resources. This Condition of Approval includes the provision of training to construction personnel to better recognize paleontological resources and establishing protocols to ensure a qualified paleontologist is contacted in the event of an unanticipated fossil discovery. Implementation of Condition of Approval GEO-1 would ensure that potential impacts to paleontological resources are less than significant.

Condition of Approval

GEO-1 Unanticipated Fossil Discovery

Paleontological Worker Environmental Awareness Program. Prior to the start of construction, a Qualified Professional Paleontologist, as defined by SVP (2010), or their designee shall conduct a paleontological Worker Environmental Awareness Program (WEAP) training for construction personnel regarding the appearance of fossils and the procedures for notifying paleontological staff should fossils be discovered by construction personnel.

Unanticipated Discovery of Paleontological Resources. The City of Seaside shall include a standard inadvertent discovery clause in every construction contract to inform contractors of this requirement. If a potential fossil is discovered during project construction, construction activity within 50 feet of the find shall cease until the discovery is examined by a Qualified Professional Paleontologist. If the find is determined to be significant, the Qualified Professional Paleontologist shall direct all mitigation measures related to paleontological resources consistent with the SVP (2010) standards.

LESS THAN SIGNIFICANT IMPACT

8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Climate Change and Greenhouse Gases

Climate change is the observed increase in the average temperature of the earth’s atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. GHGs are gases that absorb and re-emit infrared radiation in the atmosphere. The gases widely seen as the principal contributors to human-induced climate change include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), fluorinated gases such as hydrofluorocarbons and perfluorocarbons, and sulfur hexafluoride.

GHGs are emitted by both natural processes and human activities. Of these gases, CO₂ and CH₄ are emitted in the greatest quantities from human activities. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing associated with agricultural practices and landfills. Anthropogenic GHGs, many of which have greater heat-absorption potential than CO₂, include fluorinated gases and SF₆.

Regulatory Setting

The “California Global Warming Solutions Act of 2006,” (Assembly Bill [AB] 32), outlines California’s major legislative initiative for reducing GHG emissions. AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. CARB approved the first Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2009). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan’s approval.

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by establishing a quantitative goal to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). AB 1279, “The California Climate Crisis Act,” was passed on September 16, 2022 and declares the State would achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. In addition, the bill states

that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045. CARB recently adopted its 2022 Scoping Plan in December 2022, which supersedes the 2017 Scoping Plan. The 2022 Scoping Plan lays out a path to achieve AB 1279 targets (CARB 2022). The actions and outcomes in the 2022 Scoping Plan would achieve significant reductions in fossil fuel combustion by deploying clean technologies and fuels, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands to reduce emissions and sequester carbon, and the capture and storage of carbon.

Significance Thresholds

Most individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. As a result, the issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (*CEQA Guidelines* Section 15064[h][1]).

CEQA Guidelines Section 15064.4 recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions.

CEQA Guidelines Section 15064.4 does not establish a threshold of significance. Lead agencies have the discretion to establish significance thresholds for their respective jurisdictions, and in establishing those thresholds, a lead agency may appropriately look to thresholds developed by other public agencies or suggested by other experts, as long as any threshold chosen is supported by substantial evidence (see *CEQA Guidelines* Section 15064.7[c]). The *CEQA Guidelines* also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see *CEQA Guidelines* Section 15130[f]). As a note, the *CEQA Guidelines* were amended in response to SB 97. In particular, the *CEQA Guidelines* were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Pursuant to *CEQA Guidelines* Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem in the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of GHG emissions (*CEQA Guidelines* Section 15064[h][3])." Therefore, a lead agency can make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies, and/or other regulatory strategies to reduce GHG emissions.

The City of Seaside, MBARD, Monterey County, nor any other state or applicable regional agency have adopted a numerical significance threshold for assessing GHG emissions that is applicable to the project. Therefore, the project's potential impacts related to GHG emissions will be determined by evaluating the project's consistency with plans and policies adopted for the purposes of reducing GHG emissions and mitigating the effects of climate change. GHG emissions associated with the proposed project are estimated below for informational purposes only.

In the absence of a CEQA-qualified greenhouse gas reduction plan, the state recommends determining whether a proposed residential or mixed-use residential development would align with the 2022 Scoping Plan by assessing if the project is consistent with all the key project attributes identified in Table 3 of Appendix D of the 2022 Scoping Plan. Attributes identified by Table 3 of Appendix D of the 2022 Scoping Plan and the project's consistency with these attributes are shown in Table 13. According to the 2022 Scoping Plan, "Projects that have all the key project attributes should accommodate growth in a manner consistent with State GHG reduction and equity prioritization goals" (CARB 2022c). The 2022 Scoping Plan states that "Lead agencies may determine, with adequate additional supporting evidence, that projects that incorporate some, but not all, of the key project attributes are consistent with the State's climate goals" (CARB 2022c).

Methodology

GHG emissions for project construction and operation were calculated using CalEEMod. Methodology and assumptions used for modeling are described under "Methodology" in Environmental Checklist Section 3, *Air Quality*.

- a. *Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*
- b. *Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

Construction Emissions

Project construction would generate temporary GHG emissions with the operation of construction equipment, use of vehicles transporting construction workers to and from the project site, and the use of heavy-duty trucks transporting building materials. As shown in Table 11, construction associated of proposed project would generate 19,737 metric tons (MT) of carbon dioxide equivalent emissions (CO₂e).

For the purposes of this GHG analysis, it was assumed the project would have a 30-year lifetime. Construction emissions were amortized over the project's estimated 30-year lifetime because construction emissions are confined to a relatively short period of time in relation to the overall life of the proposed project. Amortized over a 30-year period, construction associated with the project would generate 658 MT of CO₂e per year. GHG emissions are cumulative; therefore, total annual emissions include the amortized construction emissions added to operational emissions, which are discussed under "*Operational Emissions*," below, for informational purposes only.

Table 11 Estimated Construction Emissions of Greenhouse Gases

Year	Annual Emissions (MT of CO₂e/year)
2024	8,553
2025	11,184
Total Construction Emissions	19,737
Amortized over 30 years	658

MT of CO₂e = metric tons of carbon dioxide equivalent
 See Appendix A for CalEEMod results.

Operational Emissions

Project operation would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation and removal. The annual operational GHG emissions are combined with the amortized construction emissions to determine overall project GHG emissions.

Annual operational emissions resulting from the project are summarized in Table 12. The project would generate approximately 1,502 MT of CO₂e per year. As previously stated, this is provided for informational purposes only.

Table 12 Combined Annual Emissions of Greenhouse Gases

Emission Source	Annual Project Emissions (MT of CO₂e)¹
Construction	395
Area	3
Energy	291
Solid Waste	144
Water	35
Mobile	371
Total Project Emissions	1,239

See Appendix A for CalEEMod results.
¹ Provided for informational purposes only.

Plan Consistency

The project’s consistency with the 2022 Scoping Plan, the Association of Monterey Bay Area Governments (AMBAG) 2045 Metropolitan Transportation Plan/Sustainable Community Strategy (MTP/SCS), and the 2004 Seaside General Plan, and the proposed Seaside 2040 General Plan are discussed in the subsections below.

2022 Scoping Plan

There are numerous state plans, policies, and regulations adopted for the purpose of reducing GHG emissions. The principal State plan and policy is AB 32, the California Global Warming Solutions Act

of 2006, as well as SB 32. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020 and the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030.

The 2022 Scoping Plan identifies plans and regulations and strategies that are to be implemented at the state and project level that will reduce GHG emissions consistent with State policies with a target of 85 percent below 1990 levels by 2045 which is the equivalent of carbon neutrality by 2045. As described above in the *Methodology* section, the state recommends determining whether a proposed residential or mixed-use residential development would align with the 2022 Scoping Plan by assessing if the project is consistent with all the key project attributes identified in Table 3 of Appendix D of the 2022 Scoping Plan. The project’s consistency with attributes identified in Table 3 of Appendix D of the 2022 Scoping Plan is shown below in Table 13. As discussed therein, the project would be consistent with these attributes and accordingly would be generally consistent with the 2022 Scoping Plan.

Table 13 2022 Scoping Plan Consistency for GHG Emissions

Key Project Attribute	Consistency
Transportation Electrification	
Provides EV charging infrastructure that, at minimum, meets the most ambitious voluntary standard of the California Green Building Standards Code at the time of project approval.	Consistent. The 2022 California Green Building Standards Code requires 25 percent of the total number of parking spaces to be electric-vehicle ready. The project would provide 32 parking spaces total, of which eight would be electric vehicle ready and two would have electric vehicle chargers. These 10 parking spaces represent approximately 30 percent of parking spaces provided by the project, which exceeds the 25 percent requirement. Therefore, the project would be consistent with this project attribute.
VMT Reduction	
Is located on infill sites that are surrounded by existing urban uses and reuses or redevelops previously undeveloped or underutilized land that is presently serviced by existing utilities and essential public services (e.g., transit, streets, water, sewer)	Consistent. The project site is surrounded by existing development to the south and east, and the project parcel is bordered by SR 1 to the west. The project would involve developing a previously undeveloped site, which would be served by existing utilities and surrounding streets. Therefore, the project would be consistent with this project attribute.
Does not result in the loss or conversion of natural and working lands	Consistent. CARB defines natural and working lands as forests, grasslands, shrublands, woodlands, rangelands, wetlands, and green spaces in urban and built environments (CARB 2018). The project site consists of undeveloped dunes, and does not fit amongst these categories. The CARB Inventory of Ecosystem Carbon in California’s Natural and Working Lands shows that the Monterey Bay region is typically within the lowest category of carbon sequestration and storage, and is not as valuable as other parts of the state such as forests in the Sierra Nevada mountains or coastal redwood forests (CARB 2018). Therefore, because the project site is not consistent with CARB’s definition of natural and working lands and does not substantially contribute to carbon sequestration and storage, the project would not result in the loss or conversion of natural lands and would be consistent with this component of the project attribute. As discussed in Environmental Checklist Section 2, <i>Agriculture and Forestry Resources</i> , the project site does not contain agricultural or forestry uses. Therefore, the project would not result in the loss or conversion of working lands and would be consistent with this component of the project attribute.

Key Project Attribute	Consistency
Consists of transit-supportive densities (minimum of 20 residential dwelling units per acre), or is in proximity to existing transit stops (within a half mile,) or satisfies more detailed and stringent criteria specified in the region’s SCS	Consistent. The project site is proximate to an existing Monterey Salinas Transit (MST) bus stop. The Gigling/7th Division Place bus stop is approximately 500 feet east of the intersection of Gigling Road and First Avenue, and approximately 850 feet from the center of the project site. Therefore, the project would be consistent with this project attribute.
Building Decarbonization	
Uses all-electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking	Inconsistent. The project would involve use of natural gas for heating and/or indoor cooking.

As described above in *Methodology*, the 2022 Scoping Plan states that “Lead agencies may determine, with adequate additional supporting evidence, that projects that incorporate some, but not all, of the key project attributes are consistent with the State’s climate goals” (CARB 2022c). As shown above in Table 13, the project would be consistent with all applicable project attributes except one. Therefore, the project would incorporate almost all of the key project attributes and would be generally consistent with the 2022 Scoping Plan.

AMBAG MTP/SCS

In June 2022, AMBAG adopted the 2045 MTP/SCS. The key goal of the MTP/SCS is to achieve GHG emission reduction targets through integrated land use and transportation strategies. Goals of the MTP/SCS include providing a transportation network that provides convenient, accessible, and reliable travel options; protecting the natural environment; fostering efficient development patterns that optimize travel, housing, and employment choices; and preserving and ensuring sustainable and safe regional transportation system. The proposed project would not result in substantial changes to transportation patterns in Seaside or the surrounding region, and would not impact the provision of transportation options in Seaside. Therefore, the project would not conflict with implementation of transportation policies of the MTP/SCS. Additionally, the project would incorporate sustainable and efficient building features, including the installation solar panels and high-efficiency landscaping, plumbing, light fixtures, and appliances as required by the 2022 Building Energy Efficiency Standards. The project would receive power from 3CE which provides energy from primarily renewable sources. Therefore, the project would be consistent with environmental and sustainability policies of the MTP/SCS.

Seaside General Plan

The City’s 2004 General Plan contains policies related to GHG emissions, and the project’s consistency with applicable policies is shown below in Table 14. Additionally, the City is in the process of updating its general plan; for informational purposes, the project’s consistency with the proposed Seaside 2040 General Plan is shown below in Table 15. As shown therein, the project would be consistent with applicable policies of the 2004 General Plan and the proposed Seaside 2040 General Plan.

Table 14 Seaside 2004 General Plan - Policy Consistency for GHG Emissions

Goal/Policy	Consistency
<p>Goal C-3. Promote the increased use of multi-modal transportation.</p> <p>Policy C-3.4: Support alternative modes of transportation that encourage physical activity, such as biking and walking.</p>	<p>Consistent. As discussed in Initial Study Section 9, <i>Project Description</i>, the project would include construction of a sidewalk along the project frontage on 1st Avenue and Gigling Road and would provide bicycle parking. Therefore, the project would support alternative modes of transportation and would be consistent with this goal/policy.</p>
<p>Goal COS-7. Encourage energy conservation.</p> <p>Policy COS-7.1. Participate in local, regional, and State programs that promote energy conservation.</p>	<p>Consistent. As described in Environmental Checklist Section 6, <i>Energy</i>, the project would be required to comply with Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. Additionally, as demonstrated in Table 13, the project would be consistent with Seaside General Plan policies pertaining to energy conservation. Therefore, the project would be consistent with this policy.</p>

Source: City of Seaside 2004

Table 15 Draft Seaside 2040 General Plan - Policy Consistency for GHG Emissions

Proposed Seaside 2040 Goal/Policy	Consistency
<p>Goal HSC-7. Citywide greenhouse gas emissions that meet State reduction targets.</p>	<p>Consistent. As discussed in Table 13, the project would be consistent with the key project attributes established by the 2022 Scoping Plan. As stated in the 2022 Scoping Plan, lead agencies may determine that projects consistent with some, but not all, of the key project attributes are consistent with the state’s climate goals. Therefore, the project would be consistent with state reduction targets and this goal of the proposed Seaside 2040 General Plan.</p>
<p>Goal HSC-9. Energy efficient buildings that use energy from renewable sources.</p>	<p>Consistent. As discussed in Environmental Checklist Section 6, <i>Energy</i>, the project would include high-efficiency landscaping, plumbing, light fixtures, and appliances as required by the 2022 Building Energy Efficiency Standards. The project would receive power from 3CE which provides energy from primarily renewable sources. Additionally, solar panels would be installed in the proposed covered parking lot, which would generate energy on-site. Therefore, the project would be consistent with this goal.</p>
<p>Goal HSC-11. New construction that meets a high-level of environmental performance.</p>	<p>Consistent. As described in Environmental Checklist Section 6, <i>Energy</i>, the project would be required to comply with Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources by the built environment during operation. Additionally, as demonstrated in Table 13, the project would be consistent with Seaside General Plan policies pertaining to energy conservation. Therefore, the project would be consistent with this policy.</p>

Source: City of Seaside 2023

As shown above, the project would be consistent with the 2022 Scoping Plan, the AMBAG 2045 MTP/SCS, the City’s 2004 General Plan, and the proposed Seaside 2040 General Plan. The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. For a project located in an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*
- b. *Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?*

Project construction would require the use of heavy equipment and machinery, such as trucks and pavers, the operation of which could result in a spill or accidental release of hazardous materials, including fuels, engine oil, engine coolant, and lubricants. The transport, storage, labeling, use and disposal of any hazardous materials would be subject to federal, state, and local regulations, which would minimize risks associated with hazardous materials used during construction. Therefore, the potential to create a significant hazard to the public or environment from the use of fuels, engine oil, engine coolant, and lubricants during construction would be less than significant. Additionally, the NPDES permit requirements would ensure that impacts related to hazardous materials from spills would be reduced through the Construction General Permit Best Management Practices (BMP), including use of straw wattles and other features.

After construction is completed, the proposed fire station and training facility would include the use of hazardous materials related to live fire training, including Class A fuels (i.e., wood, straw, and paper products). Small quantities of Class A fuels would be burned in the future training tower. Operation of the project would also require the storage of diesel fuel associated with occasional testing and use of emergency generators during power failures. No underground fuel tanks would be included in this project. Under California Health and Safety Code Section 25507(a)(1)(A), the project would be required to establish and implement a Hazardous Materials Business Plan if the amount of diesel fuel stored on-site exceeds 55 gallons. Fuel storage under 55 gallons would be required to comply with existing hazardous materials regulations in Titles 8, 22, and 26 of the California Code of Regulations. The type of proposed generator has not yet been finalized; however, it would likely be a 50-125 kilowatt stand by generator, and the fuel storage on site would be required to comply with the applicable hazardous materials regulations stated above depending on the storage tank size. These hazardous materials to be used during training would be managed in accordance with existing federal, state, and local laws and regulations, including the National Fire Protection Association training standards, that ensure that the routine transport, storage, use, and disposal of these materials would not result in a significant hazard to the public or environment. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c. *Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The project site is not located within one-quarter mile of an existing school serving children between kindergarten and 12th grade. The nearest schools are the Monterey Peninsula Unified School District Dual Language Academy and George Marshall Elementary School, both on Normandy Road, 0.5 and 0.6 mile to the southeast, respectively. Therefore, there would be no impact.

NO IMPACT

- d. *Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

The project includes development of the project site, which may have remnant hazardous materials from military uses at the former Fort Ord, a federal Superfund cleanup site. Although hazardous materials such as asbestos, lead-based paint, universal waste, and polychlorinated biphenyls (PCBs) are present in remaining undemolished buildings east of the project site, the Army is required to remediate and safely dispose of them as part of the Superfund cleanup process. Although the former Fort Ord base is a listed Superfund site, concentrations of contaminants in the project site vicinity would not exceed State regulatory limits after this remediation process because the title of these military properties may not be transferred until the toxic or hazardous situation is remedied, or the remediation process is in place and operating correctly. The Army is responsible for conducting the Superfund cleanup process, and EPA is the lead agency for regulatory enforcement and oversight of Superfund activities. The Army is also required to submit findings to the California Environmental Protection Agency (US Army Fort Ord Cleanup 2023). Therefore, under development of the project, employees and visitors would not be exposed to hazardous concentrations of remnant materials from the former Fort Ord site. In addition, lists of hazardous materials compiled pursuant to Government Code Section 65962.5 such as the State Water Resource Control Board's GeoTracker database and the Department of Toxic Substance Control's Envirostor database do not show additional active cleanup sites on or near the project site (DTSC 2023; SWRCB 2023).

Furthermore, a Phase 1 Environmental Site Assessment (ESA) conducted by Kimley-Horn in May 2023 noted no evidence of recognized environmental conditions (RECs) or historical RECs (Appendix G). The Phase 1 ESA did identify Activity and Use Limitations, which are public notes or records contained in the deed applicable to the project site. The Activity and Use Limitations for the project site include a prior presence of contaminated groundwater, presence of munitions and explosives of concern, and right to access land for environmental activities related to a Superfund site. The ESA also noted the project site is in an area surrounding the Prohibition Zone for contaminated groundwater. The Prohibition Zone includes areas with known groundwater impacts and any extraction or groundwater may be intrusive within one of the four contamination plumes associated within former Fort Ord. The proposed project would not include use of groundwater from the project site; therefore, this Activity and Use Limitation would not apply. Furthermore, all ordnance and explosives have already been removed from the vicinity of the project site, including the project parcel (USACE 2000); therefore, the Activity and Use Limitations related to munitions, explosives, and right of access would not apply.

The project would not be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- e. *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?*

Two airports are located within five miles of the project site: Marina Municipal Airport, approximately 3.5 miles to the northeast; and Monterey Regional Airport, approximately 4.3 miles to the southwest. The project site is not within the Airport Influence Area or Runway Protection Zone of either airport (County of Monterey 2019a, 2019b). Accordingly, the project site is located

far enough from both airports that the airport land use compatibility plans provisions relating to noise and safety hazards do not apply to the project. The project site is located outside the noise contours for both airports and, similarly, safety concerns associated with the need to limit development within runway protection zones are not implicated by the project. Therefore, there would be no impact.

NO IMPACT

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

Monterey County has an Emergency Operations Plan (EOP) that outlines the County's framework for managing a variety of hazards such as natural disasters and human caused events. The project would be designed in accordance with current building and fire codes and regulations and would not impair implementation of or physically interfere with the EOP, because it would not compromise emergency communication, coordination, or operating procedures. In addition, the project would provide facilities for the County's fire protection services to train and support the City's emergency management and operations. Therefore, the project would not interfere with an adopted emergency response plan or emergency evacuation plan and there would be no impact.

NO IMPACT

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

As noted in Environmental Checklist Section 20, *Wildfire*, the project site is not within a very high fire hazard severity zone or a state responsibility area. The nearest very high fire hazard severity zone is located approximately 3.5 miles south of the project site (CAL FIRE 2022). Furthermore, the project entails the construction of a new fire station and training facility on the project site, which would increase the City's capacity for wildfire response. No impact would occur.

NO IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Clean Water Act, enacted by Congress in 1972 and amended several times since, is the primary federal law regulating water quality in the United States and forms the basis for several State and local laws throughout the country. At the federal level, the Clean Water Act is administered by the USEPA and U.S. Army Corps of Engineers (USACE). At the State and regional levels in California, the act is administered and enforced by the State Water Resources Board (SWRCB) and the nine regional water quality control boards (RWQCBs). Construction that disturbs one or more acres of land is subject to the Clean Water Act's NPDES. Compliance with the NPDES permit requires each qualifying development project to file a Notice of Intent with the SWRCB. Permit conditions require the development of a stormwater pollution prevention plan (SWPPP), which must describe the site, the facility, erosion and sediment controls, runoff water quality monitoring, means of waste disposal, implementation of approved local plans, control of construction sediment and erosion control measures, maintenance responsibilities, and non-stormwater management controls. Inspection of construction sites before and after storms is also required to identify stormwater discharge from the construction activity and to identify and implement erosion controls, where necessary.

The NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4), Order No. 2013-0001-DWQ (MS4 General Permit) was issued to several regional school districts as part of the Monterey Regional Stormwater Management Program. This regional program was developed in response to the SWRCB's implementation of the NPDES Phase II Stormwater Program. The City and seven other local agencies were jointly issued MS4 General Permits to operate its storm drain system. The purpose of this program is to implement and enforce BMPs to reduce the discharge of pollutants from municipal separate storm sewer systems, such as the City's storm drain system. To achieve compliance with the regional program, and thus the conditions of the MS4 General Permit, the City implements an ordinance and regulations to prevent illegal discharges to the municipal storm drain system. Specifically, Title 8, Chapter 8.46 of the SMC establishes the discharge requirements of prohibitions to all water entering the storm drain system generated on any developed and undeveloped lands lying within the City.

- a. *Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Construction

Construction activities could result in soil erosion due to earth-moving activities such as excavation, grading, soil compaction and moving, and soil stockpiling. Runoff during storm events can occur as sheet flow across the site. The types of pollutants contained in runoff from construction could include sediment and other existing contaminants such as nutrients, pesticides, trace metals, and hydrocarbons that can attach to sediment and be transported downstream through erosion via overland flow and ultimately into the Pacific Ocean, contributing to degradation of surface water quality. Similarly, groundwater quality could be impacted by the infiltration of runoff containing pollutants associated with construction activities into the local groundwater. Construction activities would use hazardous materials such as diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, cement slurry, and other fluids required for the operation of construction vehicles or equipment. These types of hazardous materials are not acutely hazardous, and all storage, handling, use, and disposal of these materials is regulated by county, state, and federal regulations. Direct contamination of surface water is also unlikely because no defined stream channels or perennial waters are present in the project site.

The project would be required to comply with State and local water quality regulations designed to control erosion and protect water quality during construction. This includes compliance with the requirements of the NPDES Construction General Permit, which requires preparation and implementation of a SWPPP for projects that disturb one acre or more of land. Since the project is greater than one acre in size, it would be subject to the NPDES Construction General Permit and would be required to develop a SWPPP. The SWPPP must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit. Construction BMPs could include inlet protection, silt fencing, fiber rolls, stabilized construction entrances, stockpile management, solid waste management, and concrete waste management. Post-construction stormwater performance standards are also required to specifically address water quality and channel protection events. Implementation of the required SWPPP would reduce the potential for eroded soil and any contaminants attached to that soil to contaminate a waterbody following a storm event. In addition, the project would be subject to the NPDES MS4 Permit as well as Articles III, IV, and V of Chapter 8.46 of the SMC, which require appropriate BMPs to control stormwater runoff from construction sites and provides the City Engineer or its designee the authority to inspect erosion and sediment control measures and facilities associated with projects requiring a City permit.

Excavation, grading, filling, clearing, and/or erosion control work all require a permit from the City, except under certain exemptions listed in Title 15, Chapter 15.32 of the SMC. Grading and excavation plans accompanying the permit application, at a minimum, must include several measures pertaining to erosion control. These measures include: a comparison of runoff without project and with project; detailed plans and location of all temporary and permanent erosion and sediment control devices; planned direction and disposition of all storm drainage flow from all buildings, yards, lots, driveways, parking areas, and streets; vegetative erosion control and revegetation measures; and provisions for stockpiling topsoil when necessary for erosion control. Pursuant to the SMC, all earthen fill must be planted or otherwise protected from the effects of stormwater runoff within thirty days of the completion of final grading. The City may restrict or temporarily halt land disturbance or construction projects between October 15 and April 15, the normal rainy season for the City of Seaside. When construction activities are allowed during the rainy season, temporary erosion control measures must be applied to all bare soil at the end of each day. All cut and fill slopes without established vegetation during the normal rainy season must be mulched.

Compliance with the regulations and policies discussed above would reduce the risk of water degradation from soil erosion and other pollutants related to project construction activities. Because violations of water quality standards would be minimized through existing regulations, impacts to surface water quality and groundwater quality from construction activities under the project would be less than significant.

Operation

Operation of the project could result in increased polluted runoff, contributing to degradation of surface water quality. Similarly, groundwater quality could be impacted by the infiltration of runoff containing pollutants associated with operation into the local groundwater.

Pursuant to Title 8, Chapter 8.46 of the SMC, the City requires BMPs to control the volume, rate, and potential pollutant load of stormwater runoff from new development as required by the City's MS4 General Permit to minimize the generation, transport, and discharge of pollutants. The City incorporates such requirements in any land use entitlement and construction or building-related

permit to be issued relative to such development or redevelopment. These requirements, which would apply to the project, may include a combination of structural and nonstructural BMPs, and may include requirements to ensure the proper long-term operation and maintenance of these BMPs, including inspections and right of entry by city staff or its designee to ensure compliance with the requirements.

Additionally, the project would be subject to Title 15, Chapter 15.28 of the SMC. Section 15.28.170 requires, to the greatest extent possible, that peak storm drainage runoff and sediment rates from new development not exceed predevelopment rates. Runoff from buildings, roads, driveways, and the total site area of a development must be controlled by berms, swales, ditches, structures, vegetative filter strips and/or catch basins to prevent the escape of sediment from the site. If the project causes peak runoff and/or sediment rates to exceed predevelopment rates, the City Engineer may require a pro rata share of the cost of off-site erosion sediment and flood control improvements and maintenance.

In addition to requirements and prohibitions in the SMC, stormwater runoff management on the project site would adhere to the criteria identified in the Central Coast RWQCB Resolution No. R3-2013-0032, "Post-Construction Stormwater Management Requirements for Development Projects in the Central Coast Region." Resolution R3-2013-0032 establishes five distinct performance requirements based on the size and location of a project. Future commercial/mixed-use parcels would also be subject to Resolution No. R3-2013-0032 and would therefore be required to provide separate stormwater management facilities and associated stormwater control plans. As described in Initial Study Section 9, *Project Description*, the project would retain stormwater on site in on-site bioretention areas. These areas would be designed to infiltrate the 95th percentile storm and would ensure that off-site flows would not exceed pre-project conditions.

Implementation of the regulations, permit requirements, and BMPs described above would prevent or minimize impacts related to water quality and ensure that development and operation of the proposed project would not cause or contribute to the degradation of water quality in receiving waters. Construction and operation of the project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface and groundwater quality, and water quality impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project would increase the amount of impervious surfaces within project site. Implementation of stormwater infiltration features described in Initial Study Section 9, *Project Description*, and compliance with existing regulations would ensure that impacts to groundwater supplies would be less than significant, as described below.

The project would include the installation of bioretention areas, which are sized to infiltrate the 95th percentile storm. Pursuant to SMC Section 18.02.070, the project would be required to maintain or enhance on-site stormwater infiltration and would retain 100 percent of runoff on site. Stormwater infiltration through bioretention areas would allow groundwater recharge on the project site similar to pre-project conditions.

New impervious surfaces would represent a small percentage of the total basin recharge area (approximately 0.016 percent of the total basin area of 30,850 acres). Most of the land overlying the

Monterey Subbasin is undeveloped (Marina Coast Water District [MCWD] 2022). Rainfall on undeveloped areas of the Monterey Subbasin would continue to recharge the basin. In addition, SMC Section 18.02.070 requires new construction to use LID techniques such as bioswales and permeable pavement. These techniques would ensure that pervious surfaces are incorporated into the project.

Mandatory compliance with the SMC and Central Coast RWQCB post-construction requirements for stormwater management would reduce the quantity of stormwater runoff that enters the storm drainage system and discharges to the Pacific Ocean, as opposed to infiltrating the ground surface. Although the project would increase impervious surfaces, it would represent a small percentage of the total basin area and bioretention areas installed on the project site would retain and infiltrate stormwater similar to pre-project conditions. Impacts of impervious surfaces on groundwater recharge would be less than significant.

MCWD would provide water service to the proposed project, and MCWD relies on groundwater to meet projected water demand. As described under criterion *a* and *b* in Environmental Checklist Section 19, *Utilities and Service Systems*, the project would not result in water demand that would exceed the groundwater allocation to the MCWD. Wastewater from the project would be treated at the Monterey One Water regional treatment plant, where over 90 percent of the municipal wastewater is treated and delivered as recycled water, off-setting groundwater demand. Therefore, the project would not substantially decrease groundwater supplies. Potential impacts related to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?*
- c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*
- c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?*

Construction

Construction activities would involve stockpiling, grading, excavation, paving, and other earth-disturbing activities resulting in the alteration of existing drainage patterns. As described under criterion *a* above, compliance with the NPDES Construction General Permit, NPDES MS4 General Permit, and the SMC would reduce the risk of short-term erosion and increased runoff resulting from drainage alterations during construction. Direct contamination of surface water is also unlikely because no defined stream channels or perennial waters are present within the project site. Impacts would be less than significant.

Operation

The project would increase impervious surfaces on the site but would not alter the course of a stream or river. The analysis of Criterion *a*, above, discusses applicable regulations that would limit pollutant discharges, including sediment and silt, from the project. As discussed therein, the SMC requires BMPs to control the volume, rate, and potential pollutant load of stormwater runoff from new development and redevelopment projects as a requirement of the MS4 General Permit. The City incorporates such requirements in any land use entitlement and construction or building-related permit to be issued relative to such development or redevelopment. Additionally, as discussed above, projects that create and/or replace more than 2,500 square feet of impervious surface are subject to the Central Coast RWQCB post-construction requirements for stormwater management. The Central Coast RWQCB Resolution R3-2013-0032 establishes five distinct performance requirements based on the size and location of a project. The primary objective of these post-construction requirements is to ensure that the project permittee is reducing pollutant discharges to the maximum extent practicable and preventing stormwater discharges from causing or contributing to a violation of receiving water quality standards. For example, projects located within the Fort Ord redevelopment area, including the project site, are required to construct infiltration systems that retain the 100-year 24-hour design storm (CSUMB 2022a).

The project would include installation of bioretention areas, which are sized to infiltrate the 95th percentile storm. Pursuant to SMC Section 18.02.070, the project would be required to maintain or enhance on-site stormwater infiltration and would retain 100 percent of runoff on site. Stormwater bioretention areas would reduce off-site flooding potential and reduce burden on the off-site stormwater drainage system capacity similar to pre-project conditions.

The project would not contribute runoff water in a manner which would result in substantial erosion, siltation, or flooding, nor would it exceed the capacity of existing or planned stormwater drainage systems. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?*
- d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is not within a 100-year flood hazard area (FEMA 2017). Therefore, the project would not impede or redirect flood flows. In addition, the project would not be at risk of inundation due to flooding. Further, the project site is not located in a tsunami or seiche zone (DOC 2023c). Therefore, the project would not risk the release of pollutants due to project inundation. There would be no impacts related to flood flows and project inundation.

NO IMPACT

- e. *Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

Water Quality Control Plan

Development under the project would affect water quality and groundwater supply through construction and operational activities. This analysis refers to the Central Coast RWQCB Basin Plan as the applicable water quality control plan in the project vicinity. The Basin Plan identifies beneficial uses for surface water and groundwater and establishes water quality objectives to attain those beneficial uses. The identified beneficial uses and the water quality objectives to maintain or achieve those uses are together known as water quality standards. As discussed in detail under criterion *a*, compliance with relevant water quality regulations, BMPs, and policies would reduce the risk of water degradation from soil erosion and other pollutants related to project construction and operational activities.

As discussed in detail under criterion *b*, mandatory compliance with the SMC, and Central Coast RWQCB post-construction requirements for stormwater management would minimize the project's impacts on water quality. The project would not conflict with implementation of the Central Coast Basin Plan. Impacts would be less than significant.

Sustainable Groundwater Management Plan

Two groundwater sustainability agencies have been established for the Monterey Subbasin subarea: the Salinas Valley Groundwater Sustainability Agency (SVBGSA) and the MCWD Groundwater Sustainability Agency. Both agencies co-developed the comprehensive groundwater sustainability plan for a portion of the subbasin under its jurisdiction, which was submitted to the California Department of Water Resources in 2022. The plan addresses basin conditions, a water budget, locally defined sustainability criteria, protocols for monitoring sustainability indicators, and a description of projects and/or management actions that will be implemented to achieve or maintain sustainability (MCWD 2022).

The groundwater sustainability plan is meant to guide management of the Monterey Subbasin in combination with Monterey County Water Resource Agency (MCWRA)'s Long-Term Management Plan for the Salinas River Valley which is incorporated by reference and covers the project site (MCWRA 2019). This long-term management plan sets forth strategies, both currently employed and future plans, that are designed to manage the Salinas River and its interaction with groundwater resources within the Salinas Valley. Together, plan enforcement by the MCWRA, SVGSA, and MCWD will curtail future seawater intrusion and ensure sustainable management of the Salinas Valley groundwater supplies, and ensure the reliability of Basin. The MCWD wells are not in imminent threat of seawater intrusion, and the actions employed and planned by the MCWRA, the SVGSA, and MCWD will ensure that these wells are able to provide water to serve the City of Seaside in perpetuity.

For the existing conditions of the City's groundwater supply, and the effects of groundwater demand from the project, see Environmental Checklist Section 19, *Utilities and Service Systems*. As discussed therein, the potable water demand for the project would not exceed the allocations available to the project; therefore, impacts would be less than significant. Therefore, the project would not interfere with sustainable groundwater management planning efforts. Impacts related to sustainable groundwater management would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a. Would the project physically divide an established community?

A physical division of an established community typically refers to the construction of a physical feature (such as a wall, roadway, or railroad tracks) or the removal of a means of access (such as a local roadway or bridge) that would impair mobility within an existing community or between communities.

The project would construct a new fire station and training facility on the project site. The project would not construct physical features that would impair mobility or close an existing street. For these reasons, the project would not physically divide an established community and there would be no impact.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

The project site is currently zoned Open Space – Recreation and would require a Minor Use Permit for development in this zone. Many policies in the Seaside General Plan were adopted to mitigate potential environmental effects. Policy COS-4.1 requires environmental review to minimize impact on sensitive ecological and biological resources and preserving open space where feasible, and Policy LU-8.2 requires adequate drainage systems and Best Management Practices to regulate runoff. The project is consistent with Policy COS-4.1 via completion of this environmental review and by subdividing the larger parcel and retaining the remainder as open space. Lastly, the project is consistent with Policy LU-8.2 by using BMPs and constructing bioretention areas to treat stormwater. As discussed within the individual sections of this Initial Study, the project would not cause a significant environmental impact due to a conflict with plans, policies, or regulations adopted for the purpose of avoiding or mitigation an environmental effect. Therefore, the impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*
- b. *Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?*

The project site is in a Mineral Resource Zone-2, indicating the presence of significant construction aggregate resources (DOC 2021). However, there are no identified mineral resource recovery sites on the project site. Development of the project would not result in the loss of availability of a mineral resource or locally important mineral resource recovery site. There would be no impact.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions. Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels.

DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this analysis are the equivalent noise level (L_{eq}) and the community noise equivalent level (CNEL).

The L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using CNEL, which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).

Groundborne Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as groundborne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Typically, ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV). The PPV is normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used as it corresponds to the stresses that are experienced by buildings (Caltrans 2020).

High levels of groundborne vibration may cause damage to nearby building or structures; at lower levels, groundborne vibration may cause minor cosmetic (i.e., non-structural damage) such as cracks. These vibration levels are nearly exclusively associated with high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, or excavation. Vibration limits used in this analysis to determine a potential impact to local land uses from construction activities, such as, vibratory compaction or excavation, are based on information contained in the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). Groundborne vibration levels that could induce potential architectural damage to buildings are identified in Table 16. Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec PPV at non-engineered timber and masonry buildings (which would apply to the nearby buildings) would prevent architectural damage.

Table 16 Groundborne Vibration Architectural Damage Criteria

Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Nonengineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

in/sec = inches per second; PPV = peak particle velocity
 Source: FTA 2018

Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. Noise sensitive receptors generally include schools, parks, residential areas, hospitals, churches, courts, libraries, and care facilities. The City’s General Plan identifies that sensitive receivers include residences, schools, hospitals, religious meetings, and recreation areas (City of Seaside 2004). Noise-sensitive receivers nearest to the project site include military residential development south of the site across Gigling Road.

The measured distance to sensitive receivers depends on the type of noise being generated. For example, noise from mobile construction equipment would move throughout the entire construction area, with the average distance to sensitive receiver property line measured from the center of the construction phase area. Conversely, the closest distance between mobile construction equipment and sensitive buildings is used for vibration-generating equipment, as the potential for building architectural damage is based on the peak vibration level. Noise from stationary sources, such as that from stationary operational equipment, is measured from the proposed location of the nearest piece or group of equipment to the sensitive receiver property line. For the purposes of this analysis, Table 17 provides the distances used for the various noise sources.

Table 17 Distances to Sensitive Receivers

Noise Source	Nearest Residential Receiver (South of Project Site)	Nearest Commercial Receiver (East of Project Site)
Construction Noise from Site Preparation and Grading	300	245
Construction Noise from Building Construction and Architectural Coating	200	270
Construction Noise from Paving	190	310
Operational Noise from Mechanical Equipment	110	215
Operational Noise from the Training Area	500	500
Vibration from Construction Equipment	100	180

Ambient Noise Levels

The most common source of noise in the project site vicinity is vehicular traffic (e.g., automobiles, buses, and trucks) on SR 1 and 1st Avenue. Noise levels along SR 1 in the project site vicinity vary from 60 to 70 CNEL, and noise levels along 1st Avenue in the project site vicinity vary from 60 to 65 CNEL (City of Seaside 2004). Ambient noise levels are generally highest during the daytime and rush hour unless congestion substantially slows speeds. Motor vehicle noise is of concern because it is characterized by a high number of individual events, which often create sustained noise levels. There are no other significant sources of noise in the project vicinity.

To characterize ambient sound levels at and near the project site, three 15-minute sound level measurements and one 24-hour sound level measurement were conducted on Thursday, March 23, 2023 and Friday, March 24, 2023. Meteorological conditions during the measurement periods were favorable for outdoor sound measurements and were noted to be representative of the typical conditions for the season. An Extech Model 407780A was used to conduct the measurements, which satisfies the American National Standards Institute standard for Type 2 instrumentation. The sound level meter was equipped with a windscreen during measurements. The sound level meter was set to “slow” response and “A” weighting (dBA). The meter was calibrated prior to and after the monitoring period. All measurements were at least 5 feet above the ground and away from reflective surfaces.

Table 18 and Table 19 summarizes the results of the noise measurements. Detailed sound level measurement data are included in Appendix H.

Table 18 Short-Term Noise Monitoring Results

	Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	L _{eq} (dBA)	L _{min} (dBA)	L _{max} (dBA)
ST1	South of the project site along Gigling Road, adjacent to military residential development	12:58 – 1:13 p.m.	Approximately 20 feet to Gigling Road centerline	67.7	53.7	93.7
ST2	Approximately 200 feet south of project site on 15th Infantry Avenue, adjacent to military residential development	1:20 – 1:35 p.m.	Approximately 10 feet to 15th Infantry Avenue centerline	53.4	49.5	69.7
ST3	East of project site in Ord Community Commissary driveway along 1st Avenue	1:41 – 1:56 p.m.	Approximately 15 feet from 1st Avenue centerline	63.0	56.9	80.5

L_{eq} = average noise level equivalent; dBA = A-weighted decibel; L_{min} = minimum instantaneous noise level; L_{max} = maximum instantaneous noise level

Detailed sound level measurement data are included in Appendix H.

Table 19 Long Term Noise Monitoring Results

Sample Time	dBA L _{eq}	Sample Time	dBA L _{eq}
LT1 – Southern Portion of Project Site, March 23 – 24, 2023			
2:13 p.m.	57	2:13 a.m.	47
3:13 p.m.	57	3:13 a.m.	47
4:13 p.m.	61	4:13 a.m.	51
5:13 p.m.	59	5:13 a.m.	57
6:13 p.m.	59	6:13 a.m.	58
7:13 p.m.	55	7:13 a.m.	61
8:13 p.m.	55	8:13 a.m.	55
9:13 p.m.	54	9:13 a.m.	56
10:13 p.m.	53	10:13 a.m.	54
11:13 p.m.	50	11:13 a.m.	52
12:13 a.m.	50	12:13 p.m.	56
1:13 a.m.	48	1:13 p.m.	57
24-hour Noise Level (dBA CNEL)			61

dBA = A-weighted decibels; L_{eq} = equivalent noise level; CNEL = community equivalent noise level

See Appendix H for full measurement details.

City of Seaside Noise Standards

Noise Ordinance

Chapter 9.12, Noise Regulations, of SMC establishes qualitative thresholds for unacceptable noise levels and prohibits certain activities that generate excessive, unnecessary, or unusually loud noise and vibration. Standards that would be considered when determining if noise levels violate this

ordinance include but are not limited to volume or intensity of the noise; citizen complaints; proximity of the noise to residential areas; the duration of the noise; and the frequency of the noise. Section 9.12.030 prohibits excessive, unnecessary, or unusually loud operation of construction equipment between 7:00 p.m. and 7:00 a.m. on weekdays and 7:00 p.m. and 9:00 a.m. on weekends and holidays. Section 9.12.040 establishes sources of noise that are exempt from this ordinance, including radios, sirens, horns, or bells on emergency response vehicles. Table 20 below summarizes the exterior noise standards established in SMC Section 17.30.060.E.1.b.

Table 20 Seaside Municipal Code Exterior Noise Standards

Land Use	Exterior Noise Standard (dBA, L _{max})
Residential	65
Mixed Use Residential	70
Commercial	70
Office	70
Industrial	75
Public Facilities	70
Schools	50

Source: City of Seaside 2023

- a. *Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Variation in power from construction equipment imposes additional complexity in characterizing the noise source level. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the L_{eq} of the operation. Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels, but only during certain times of day. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). Noise levels are based on the CalEEMod default construction equipment mix by phase from the Environmental Checklist Section 3, *Air Quality*. It is assumed that diesel

engines would power all construction equipment. However, construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Because the City does not have a quantitative construction noise threshold, for purposes of analyzing impacts from this project, the FTA *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018) criteria were used. The FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 80 dBA L_{eq} for an 8-hour period (FTA 2018).

Construction activities would be located as close as 60 feet to the closest sensitive receptors but would typically be located at an average distance further away due to the nature of construction. The estimated noise levels of each construction phase, as well as distances to the nearest sensitive receivers, are shown in Table 21.

Table 21 Estimated Noise Levels by Construction Phase (Leq dBA)

Construction Phase	RCNM Reference Noise Level at 50 feet	Residences to the South ¹	Community Commissary to the East ²
Site Preparation	84	68	70
Grading	85	69	71
Building Construction	82	70	67
Architectural Coating	74	62	59
Paving	84	72	68

¹ A distance of 300 feet, or the distance between the residences to the south and the center of the project site, is used for the Site Preparation and Grading phases to estimate average noise levels during these phases as equipment moves throughout the project site. A distance of 200 feet, or the distance between the residences to the south and the center of the proposed fire station, is used for the Building Construction and Architectural Coating phases to estimate noise from building construction. A distance of 190 feet, or the average distance between the residences to the south and parking lots and driveways, is used for the Paving phase to estimate paving activity noise. Distances were estimated with measurements from Google Earth and a review of the site plans.

² A distance of 245 feet is used for the Site Preparation and Grading phases. A distance of 270 feet is used for the Building Construction and Architectural Coating phases. A distance of 310 feet is used for the Paving phase.

Source: Roadway Construction Noise Model. See Appendix I for modeling outputs.

Construction equipment is typically dispersed in various areas of the site, with only a limited amount of equipment operating near a given location at a particular time. The FTA 2018 *Transit Noise and Vibration Impact Assessment* document recommends this approach on page 177, stating that for the distance variable in its construction noise calculation “assumes that all equipment operates at the center of the project.” Therefore, it is common, industry standard practice to analyze average construction noise from the center of the site because this is the approximate center of where noise is being generated, as equipment moves around the site throughout the workday. In accordance with FTA recommendations, construction noise from site preparation and grading was analyzed from the center of the site, as construction equipment for these phases would be moving throughout the site. Construction noise from building construction and architectural coating were analyzed based upon the center of the closest proposed building to the sensitive receptors, as buildings are proposed at different locations throughout the project site. Construction noise from paving was analyzed based upon the center of the proposed paving area to the sensitive receptors, as paving is proposed at different locations throughout the project site. The closest sensitive receptors to the project site are the single-family residences adjacent to the southern project boundary and the Community Commissary adjacent to the eastern project boundary. As shown in

Table 21, the shortest average distance between construction activities and sensitive receptors is approximately 190 feet, which would occur during project paving.

At a distance of 190 feet, paving activity would generate a noise level of up to 72 dBA L_{eq} (RCNM calculations are included in Appendix I). Therefore, construction noise levels would not exceed the FTA noise threshold of 80 dBA L_{eq} for residential uses, and impacts would be less than significant.

Operation

Mechanical Equipment

The project would include rooftop mechanical equipment, which would generate noise during operation. Using sound power data provided by the project applicant, the six closest pieces of rooftop mechanical equipment to single-family residential and commercial property would include three vehicle exhaust system fans rated at a 99 dBA sound power level and three vehicle exhaust system fans rated at 100 dBA sound power level. Assuming that the units were to run for an entire 24-hour period, the closest residential property line to the south, at a distance of approximately 110 feet from the center of the proposed mechanical equipment, would be exposed to a noise level of up to 69 dBA. At the Community Commissary to the east, at a distance of approximately 215 feet, project operational mechanical equipment noise would be up to 63 dBA, which would not exceed the exterior noise standard for commercial uses of 70 dBA. Estimated rooftop mechanical equipment noise levels are shown in Table 22.

Table 22 Estimated Rooftop Mechanical Equipment Noise Levels (Leq dBA)

Quantity	Equipment	Reference Noise Level at 3 feet	Residences to the South at 110 feet	Community Commissary to the East at 215 feet
6	Vehicle Exhaust System Fan	99	69	62

Source: Appendix I

A sound level of 69 dBA would exceed the City’s 65 dBA exterior noise standard for residential areas. Therefore, this impact is potentially significant. Implementation of Mitigation Measure NOI-1 would reduce this impact to a level of less than significant.

Other Operational Noise

Other noise sources associated with operation of the proposed fire station would consist of training activities, use of sirens, vehicular noise, and site and landscaping maintenance activities. The proposed training facilities are located on the northwestern portion of the site, farther from nearby sensitive receptors, and would be used for live fire training and emergency response scenario practice. Training would occur for up to two hours each day as part of ongoing shift training, and 8 hours per day for 5 days per month for monthly training classes. Training activities would involve activities including but not limited to driver training, vehicle extrication, forcible entry, and hose pulling, all of which would generate noise.

Noise measurements and an analysis of fire station training activities was recently conducted in June 2022 for the Alameda County Fire Department. Information from this noise study is appropriate to use in this analysis as training activities measured at that facility would be similar to those that would occur for this project. Fire department training activities that were captured by this analysis included vehicle extrication, operation of tools and pumps, and use of fire engine sirens

and horns. Noise measurements were taken 150 feet from the center of the training area (County of Alameda 2023). The noise level at 150 feet was approximately 72 dBA during driver operations training using sirens and horns, and 62 dBA during other training involving the use of tools and vehicle extrication (County of Alameda 2023). For the proposed project, training activities would occur approximately 500 feet from the nearest sensitive receivers (residences to the south and the Community Commissary to the east, measured from the center of the proposed training area). The residences to the south would be shielded from the training area by the proposed fire station, which is conservatively assumed to provide 10 dBA of noise reduction. Accordingly, training activity noise would be reduced at the nearest residences due to shielding and noise attenuating over a distance of 500 feet. Noise would attenuate to be approximately 52 dBA, which would not exceed the City's residential noise standard of 65 dBA. The Community Commissary to the east would be partially shielded from the training area by an intervening existing fence and trees. Additionally, the noise level of 72 dBA at 150 feet from training operations would attenuate to approximately 62 dBA at 500 feet.² This noise level would not exceed the City's commercial noise standard of 70 dBA. Therefore, operational training activity noise would be less than significant.

Other operational noise, such as non-training vehicular noise and site maintenance noise, would be typical of noise generated by neighboring land uses and would not substantially contribute to overall ambient noise levels. Additionally, as discussed under *City of Seaside Noise Standards*, the use of sirens by emergency response vehicles (in non-training scenarios) is exempt from the City's noise ordinance per SMC Section 9.12.040. Therefore, on-site operations would not generate an increase in ambient noise levels in excess of local standards and impacts would be less than significant.

Off-site Roadway Noise

The project's contribution to roadway noise was evaluated by comparing existing traffic noise levels to traffic noise levels with operation of the project. Generally, a doubling of traffic (i.e., 100 percent traffic increase) would increase noise levels by approximately 3 dBA, which is the human level of perception for an increase in noise (FTA 2018).

The proposed project would generate new vehicle trips and increase traffic on area roadways. As noted in Environmental Checklist Section 17, *Transportation*, the project would add a maximum of approximately 62 daily trips during training operations. Existing traffic volumes on area roadways were estimated by Central Coast Transportation Consulting to be 1,100 trips on 1st Avenue and 2,500 trips on Gigling Road (Central Coast Transportation Consulting 2023).

The 62 daily trips added by the project would result in a 6 percent increase in daily trips on 1st Avenue and a 3 percent increase in daily trips on Gigling Road. Net new daily trips added by the project would increase traffic noise on 1st Avenue by 0.2 dBA and on Gigling Road by 0.1 dBA.³ The increase in trips would not double the level of traffic on area roadways, and accordingly would not increase noise levels by 3 dBA. Such an increase would be imperceptible and would not result in a substantial permanent increase in ambient noise levels. Therefore, off-site roadway noise would not generate an increase in ambient noise levels in excess of local standards and impacts would be less than significant.

² The noise decrease associated with attenuation over distance is determined by the formula reference noise level – 20 x log (actual distance/reference distance).

³ The noise increase associated with a traffic increase is determined by the formula 10 x log(new daily trips/existing daily trips).

Mitigation Measures

NOI-1 Mechanical Noise Reduction

Prior to the issuance of a building permit, the project plan drawings shall be revised to include a parapet wall at the southern edge of the rooftop at a height that breaks the line-of-sight between the rooftop mechanical equipment and the residences to the south. The parapet wall shall be constructed of a solid material with a minimum surface density of four pounds per square foot and be continuous from the base of the roof with no gaps. The revised plans shall be submitted to the City for review and approval, prior to building permit approval. The City shall confirm compliance prior to occupancy.

Significance After Mitigation

Implementation of Mitigation Measure NOI-1 would reduce project operational noise levels at the residences to the south by at least 5 dBA (FHWA 2001). This would result in a noise level of up to 64 dBA, which would not exceed the significance threshold of 65 dBA for residential, and this impact would be less than significance with mitigation.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

b. *Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

Construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project site. The greatest vibratory source during construction would be a vibratory roller. Neither blasting nor pile driving would be required for construction of the proposed project. Construction vibration estimates are based on vibration levels reported by the FTA (FTA 2018). Table 23 shows typical vibration levels for various pieces of construction equipment used in the assessment of construction vibration at a reference distance of 25 feet (FTA 2018).

Table 23 Vibration Levels Measured during Construction Activities

Equipment	PPV at 25 feet (inches/second)
Vibratory Roller	0.21
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: FTA 2018

As stated previously, the greatest anticipated source of vibration during general project construction activities would be from a roller. A roller could be used during paving activities and may be used within 100 feet of the nearest off-site residences to the south and 180 feet of the Community Commissary to the east. A roller would create approximately 0.21 in/sec PPV at 25 feet, as shown in Table 23 (FTA 2018). Beyond 25 feet, construction vibration would attenuate below the threshold of 0.2 in/sec PPV. Since paving and other construction activity would occur at distances well beyond 25 feet, construction vibration would not exceed the threshold of 0.2 in/sec PPV. Therefore, temporary vibration impacts associated with project construction would be less than significant.

The proposed project would not generate significant stationary sources of vibration, such as manufacturing or heavy equipment operations. No operational vibration impact would occur.

LESS THAN SIGNIFICANT IMPACT

- c. *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?*

The project site is located approximately 3.5 miles southwest of Marina Municipal Airport, and 4.2 miles north of Monterey Regional Airport. The project site is not within the noise contours of either airport, as shown in their respective airport land use compatibility plans (County of Monterey 2019a, 2019b). Therefore, the project would not expose people residing or working in the project site to excessive aircraft noise. There would be no impact.

NO IMPACT

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

- a. *Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

A project can induce substantial population growth by: 1) proposing new housing beyond projected or planned development levels, 2) generating demand for housing as a result of new businesses, 3) extending roads or other infrastructure to previously undeveloped areas, or 4) removing obstacles to population growth (i.e., expanding capacity of a wastewater treatment plant beyond that necessary to serve planned growth).

The project entails the construction of a new fire station and training facility. The fire station would house up to eight full time personnel; this small number of employees would not be considered a substantial indirect increase in population growth. Most employees are expected to already reside locally within Seaside or surrounding areas. The project would not extend roadways or other infrastructure, nor remove obstacles to population growth (refer to Environmental Checklist Section 19, *Utilities and Service Systems*) that could indirectly induce growth. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- b. *Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project site is currently undeveloped open space and does not provide housing. Implementation of the project would not demolish housing, displace existing residents, or necessitate the construction of replacement housing elsewhere. No impact would occur.

NO IMPACT

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15 Public Services

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

1	Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3	Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5	Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?

The project includes the construction of fire training facilities and the new Fire Station No. 2 on the project site. The project itself would not increase demand on fire protection facilities, as it would increase the City’s fire protection resources. The environmental impacts of the proposed fire station are evaluated throughout this Initial Study.

Furthermore, the project would be constructed in accordance with current state and local building and fire codes to ensure structural stability and safety. The City’s Planning Division would review the final site design for consistency with applicable fire department standards. Therefore, the project would not result in the need for new fire protection facilities or services. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.2. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

While the project would intensify development at the project site, the project would construct a fire station and a training facility. It is not anticipated that the firefighters, trainees, and instructors would generate the need for additional police protection services. The project includes one Police Department office in the facility, which would be staffed part-time. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.3. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

As described under Environmental Checklist Section 14, *Population and Housing*, the proposed project does not include any residential development, and no new students would be directly generated by implementation of the project. The project would not result in an adverse physical impact due to the construction of new or physically altered school facilities. There would be no impact.

NO IMPACT

- a.4. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

As described under Environmental Checklist Section 14, *Population and Housing*, the project would not increase the Seaside population. On-site fire department staff may elect to use local parks and trails; however, this increase in usage would be minimal, since the proposed development includes landscaped open space and on-site outdoor amenities such as a community patio and firefighter patios, including workout space. Therefore, the proposed project would not result in an adverse physical impact due to new or physically altered park facilities. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

- a.5. *Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

As described under Environmental Checklist Section 14, *Population and Housing*, the proposed project would not increase the Seaside population. Other public facilities, such as libraries, would not incur increased demand for services such that new or physically altered facilities would be

required. Therefore, the project would have no adverse impact on the performance of public facilities. Impacts would be less than significant.

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16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*
- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?*

This project would intensify development at the project site; however, the project would not result in increased population of the City of Seaside, as described in Environmental Checklist Section 14, *Population and Housing*. Future employees may elect to use nearby recreational facilities; however, this increase in usage would be minimal, since the proposed development includes on-site landscaped areas, community patio in the entry plaza, and firefighter amenities, including workout spaces inside and outside of the building. Therefore, the proposed project would not increase the usage of recreational facilities such that construction of new facilities or expansion of existing recreational facilities would be required. Impacts would be less than significant.

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Central Coast Transportation Consulting prepared a Transportation Analysis Memorandum in June 2023, included herein as Appendix B. The memo estimates additional trips the project would generate based on land use type, provides recommendations for the intersection of Gigling Road and 1st Avenue and the project vicinity, and includes a summary of Vehicle Miles Travelled (VMT) thresholds to use for projects in the City of Seaside. The analysis presented in this section is based on this memorandum.

- a. *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Roadway Network

The project would not alter the existing roadway network, though, as noted in criterion *b* below, the project would contribute approximately 60 total daily trips to the roadway network. The City’s General Plan Circulation Element contains Goals C-1, C-2, and C-3 and related policies to provide and maintain an adequate City circulation system, integrate the local system with the regional system, and promote alternative modes of transportation. The project would not conflict with these goals because it would not alter the existing roadway network. Therefore, the project would not conflict with policies addressing the circulation system and impacts would be less than significant.

Bicycle Facilities

The City has planned bicycle lanes in the project vicinity on Lightfighter Drive to the north and on Gigling Road east of 6th Division Road, approximately 1,000 feet east of the site (City of Seaside 2023). There are no existing or planned bicycle facilities abutting the project site. The project would not alter or conflict with existing or proposed bikeways in the vicinity of the project site nor

programs or plans such as the Transportation Agency for Monterey County (TAMC)'s Active Transportation Plan (TAMC 2018). Therefore, the project would not conflict with policies addressing bicycle facilities and impacts would be less than significant.

Pedestrian Facilities

The project would include sidewalk construction along the site frontages with 1st Avenue and Gigling Road. The project would not conflict with programs or plans such as the TAMC Active Transportation Plan or the City of Seaside 2004 General Plan Update, which identifies pedestrian improvements in the city, none of which are adjacent to the project site. Therefore, the project would not conflict with policies addressing pedestrian facilities and impacts would be less than significant.

Transit Facilities

Transit facilities in the project vicinity include the Monterey-Salinas Transit bus route 18 providing service from Marina to Sand City. The route uses Gigling Road fronting the project site and would not be affected by project construction or operation. Monterey-Salinas Transit has additional routes and service planned but not in the project vicinity. The City's 2004 General Plan includes policies that support transit service that is frequent, convenient and maximizes ridership potential. The proposed project would not interfere with existing transit facilities or conflict with planned transit facilities or adopted transit system plans, including the Association of Monterey Bay Area Governments Metropolitan Transportation Plan and Sustainable Communities Strategy, the TAMC Regional Transportation Plan, nor the City's 2004 General Plan, and *Draft Seaside 2040*. Therefore, the project would not conflict with policies addressing transit facilities and impacts would be less than significant.

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- b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

This checklist question pertains specifically to VMT as the means of analyzing the transportation impacts of a project. The City of Seaside has not adopted VMT thresholds. However, according to the Office of Planning and Research guidance, projects that generate fewer than 110 daily trips can be exempt from VMT analysis and can be presumed to have a less than significant impact (California Office of Planning and Research 2018). Using the ITE rate for Fire and Rescue Station (Land Use #575), the project would generate approximately 60 daily trips and 6 PM peak hour trips (Appendix B).

The proposed training facility would be used daily by up to seven firefighters from Seaside. The facility would host monthly classes with an attendance of up to 20 firefighters from Monterey County. Additionally, the site could host a weeklong State Fire Marshal class where Monterey County firefighters and firefighters from other regions could attend a course. Assuming the Seaside employees would already be on site, the training center would typically add up to 20 additional firefighters when in use. The training center could be considered an industrial use with the firefighters and trainees as employees. Using the ITE rate for Light Industrial (Land Use #110), up to 62 trips per day including 10 PM peak hour trips would be anticipated during these monthly classes (Appendix B). While the training facility and fire station could result in a total daily trip count of up to 122 trips, the average daily trips would be 77, as the training facility would generate these

additional trips one day per month for monthly classes and seven additional days for the weeklong course.⁴

Many jurisdictions consider essential services that support health, safety, and welfare to be exempt from VMT analysis since their trips are non-discretionary. VMT for work-based land uses is typically analyzed per employee and does not include non-typical or emergency operations. Therefore, since the project trips are non-discretionary and generate fewer than 110 daily trips under typical operations, the project would have a less than significant impact on VMT.

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- c. *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

Access to the project site would be provided via Gigling Road and 1st Avenue. The proposed project involves the construction of a new two-way driveway on Gigling Road, providing access to the employee parking area and apparatus bay. Additionally, the project includes the construction of a new two-way driveway for the main parking area and a one-way exit driveway from the apparatus bay onto 1st Avenue. Because the project is a fire station, it is designed to accommodate fire apparatus and provide adequate emergency vehicle turning radius. As such, the project would not result in a hazardous geometric design.

The project site is surrounded by a mix of government and residential uses, and is located less than 0.5 mile from an existing Presidio of Monterey fire station. The proposed fire department is a public use that would not be considered an incompatible land use in the area. The project does not propose a use that would bring unusual equipment on the roadways (e.g., farm equipment). For this reason, the project would not result in a significant impact due to incompatible uses.

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- d. *Would the project result in inadequate emergency access?*

Emergency vehicle access to the project site would be provided via two driveways on 1st Avenue and one on Gigling Road. The site would be accessible from all directions of travel, and would accommodate emergency vehicles, including the fire apparatus. The project would be reviewed by the Seaside Fire Department for consistency with applicable CBC and Fire Code requirements for access and safety. As such, the proposed project would have a less than significant emergency access impact.

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⁴ Assuming 30 days per month, 60 trips per day would occur at the fire station each day (1,800 trips per month), and 62 trips per day would occur at the training facilities for a maximum of 8 days per month (496 trips per month); the average daily trips would be (1,800 trips + 496 trips) / 30 days = an average of 77 trips per day.

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18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
<p>Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:</p>				
<p>a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Assembly Bill 52

AB 52 of 2015 expanded CEQA by defining a new resource category, “tribal cultural resources.” AB 52 states “a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment” (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3). PRC Section 21074 (a)(1)(A-B) defines tribal cultural resources as “sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe” and is:

1. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified. Under AB 52, lead agencies are required to “begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project.” Native American tribes to be included in the process are those that have requested notice of projects proposed within the jurisdiction of the lead agency.

Senate Bill 18

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill [SB] 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan. The Tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research’s *Tribal Consultation Guidelines* (2005) “The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places.” SB 18 refers to PRC Section 5097.9 and 5097.995 to define cultural places as:

- A Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine (PRC Section 5097.9).
- A Native American historic, cultural, or sacred site, that is listed or may be eligible for listing in the CRHR pursuant to Section 5024.1, including any historic or prehistoric ruins, any burial ground, any archaeological or historic site (PRC Section 5097.995).

Records Search and Outreach

Rincon contacted the NAHC and requested a search of the SLF for the project area. The NAHC responded on March 20, 2023 stating the results of the SLF search were negative.

In accordance with AB 52 and SB 18, the City as the lead agency has conducted Native American tribal consultation. The AB 52 and SB 18 letters were sent via certified mail on April 12, 2023. This consultation included written communication with the following tribes traditionally and culturally affiliated with the project area:

- Amah Mutsun Tribal Band
- Amah Mutsun Tribal Band of Mission San Juan Bautista
- Costanoan Rumsen Carmel Tribe
- Esselen Tribe of Monterey County
- Indian Canyon Mutsun Band of Costanoan
- Ohlone/Costanoan-Esselen Nation
- Wuksache Indian Tribe/Eshom Valley Band
- KaKoon Ta Ruk Band of Ohlone-Costanoan Indians of the Big Sur Rancheria
- Rumšen Am:a Tur:ataj Ohlone

On April 27, 2023, the Esselen Tribe of Monterey County (ETMC) requested formal AB 52 consultation with the City, and requested copies of the Cultural Resources Assessment and Biological Resources Assessment prepared for the project. The ETMC also recommended that tribal cultural resources sensitivity training be conducted with construction personnel prior to project ground disturbance, and that project-related ground disturbance be monitored by an ETMC representative. After repeated attempts to continue consultation, Tribal consultation under AB 52 with the ETMC concluded on November 22, 2023.

On June 8, 2023, the Ohlone/Costanoan-Esselen Nation (OCEN) requested formal AB 52 and SB 18 consultation with the City. The City met with OCEN on November 14, 2023, at which time the results of the Cultural Resources Assessment were shared, as well as the recommended mitigations as a result of that Assessment. OCEN requested a copy of the Cultural Resources Assessment, which was provided after the meeting. The City met with OCEN again on December 5, 2023, at which time OCEN requested that the project be monitored by an OCEN representative. Tribal consultation under AB 52 with the OCEN is ongoing.

No other Native American tribes requested consultation under AB 52 within the 30-day response window. No other Native American tribes requested consultation under SB 18 within the 90-day response window.

- a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)?*
- b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1?*

Neither the cultural resources records search nor Native American consultation through AB 52 identified cultural resources listed on or eligible for listing on the CRHR or a local register within the project site. However, there is always potential to uncover buried archaeological and tribal cultural resources during ground disturbing activities, which could potentially be considered tribal cultural resources eligible for listing in the CRHR or a local register or be considered tribal cultural resources. The City requires Conditions of Approval TCR-1 for Native American monitoring, TCR-2 for Tribal Cultural Sensitivity Training, and TCR-2 for the potential discovery of unanticipated tribal cultural resources. This Condition of Approval requires tribal cultural resources to be preserved in the event they are uncovered during construction and would reduce the potential for the project to cause a substantial adverse change in the significance of a tribal cultural resource. Implementation of Condition of Approval TCR-1 would ensure that potential impacts to tribal cultural resources are less than significant.

Conditions of Approval

TCR-1 Native American Monitoring

The City shall retain a locally-affiliated Native American representative to monitor project-related ground-disturbing activities, with one monitor per soil-disturbing location. Monitors shall have the authority to halt and redirect work, should any tribal cultural resources be identified during monitoring. If resources are encountered during ground-disturbing activities, work in the immediate

area (50 feet of the discovery) shall halt. Native American monitoring may be reduced or halted at the discretion of the monitor, in consultation with the City, as warranted by conditions such as encountering bedrock, sediments being excavated are fill, or negative findings during the first 50 percent of ground disturbance.

TCR-2 Tribal Cultural Sensitivity Training

The City shall retain a locally-affiliated Native American representative to conduct a Tribal Cultural Sensitivity Training for all construction personnel prior to the commencement of any ground-disturbing activities. The training shall include a description of the types of cultural material that may be encountered, cultural sensitivity issues, the regulatory environment, and the proper protocol for treatment of the materials in the event of a find.

TCR-3 Unanticipated Discovery of Tribal Cultural Resources

In the event that archaeological resources of Native American origin are identified during implementation of the proposed project, ground-disturbing activities within 50 feet of the find shall be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find as a cultural resource and an appropriate local Native American representative is consulted. If the City, in consultation with traditionally and culturally affiliated Native American group(s), determines the resource is a tribal cultural resource and thus significant under CEQA, a mitigation plan shall be prepared and implemented in consultation with traditionally and culturally affiliated Native American group(s). The plan shall include measures to ensure the find is treated in a manner that respectfully retains, to the degree feasible, the qualities that render the resource of significance to the local Native American group(s). Examples of appropriate mitigation for tribal cultural resources include, but are not limited to, avoidance, protecting the cultural character and integrity of the resource, protecting traditional use of the resource, protecting the confidentiality of the resource, or heritage recovery.

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

- a. *Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?*
- c. *Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?*

Water

The project would require a water lateral connection to the existing water conveyance pipes adjacent to the project site. MCWD has a groundwater use limit of 3,020 acre-feet per year (AFY), and former Fort Ord has a groundwater use limit of 6,600 AFY (MCWD 2021). The Salinas Valley Groundwater Basin has an estimated 19.8 million acre-feet of storage capacity, and groundwater levels have not declined significantly during drought cycles, so pumping within the agreed-upon limits is considered reliable (MCWD 2021). Additionally, MCWD is currently constructing a recycled water distribution network for the provision of urban landscape irrigation (MCWD 2021). The project is in the Ord Community Area which has 5,200 AFY of potable groundwater allocated. Water deliveries to the Ord Community Area in 2020 totaled 1,669 AFY, resulting in approximately 3,531 AFY capacity available. The project would require less than 5 AFY, shown in Table 24, or approximately 0.1 percent of the remaining available water supply capacity. Therefore, the project water demand would not result in a need for MCWD to expand water supplies to meet the increased water demand associated with the project. Additionally, because existing water conveyance infrastructure is located adjacent to the project site, the project would not require the construction or expansion of water delivery systems. Therefore, the project would not result in significant environmental effects related to the relocation or construction of new or expanded water facilities.

Table 24 Estimated Water Demand

Land Use	Size	Water Demand Rate (acre-feet/year)*	Total (AFY)
Dorm Rooms	8 beds	0.2	1.60
Storage Areas	5,762 sf	0.00001	0.06
Community Room	1,096 sf	0.000092	0.10
Offices	4,155 sf	0.00092	0.28
Landscape	1.14 acres	2.1	2.40
Total			4.54

Notes: sf = square feet; AFY = acre-feet/year (one AF = 325,850 gallons)

Source: Water demand rates are based on information provided in the MCWD Code of Ordinances (MCWD 2020), and MCWD Urban Water Management Plan (MCWD 2021).

Wastewater Treatment

The project would generate a new source of wastewater, which would flow through the existing MCWD conveyance system to the Regional Wastewater Treatment Plant in Marina, approximately 4.4 miles north of the site. Due to system losses, the water demand is anticipated to be 120 percent of wastewater generated; therefore, the project would generate approximately 3.8 acre-feet of wastewater per year using water demand estimate provided in Table 24. The Regional Wastewater Treatment Plant had unused but permitted treatment capacity of approximately 12.6 million gallons per day (mgd) during dry weather and about 58.6 mgd during peak wet weather conditions (Monterey One Water 2019). The project would therefore account for less than 0.001 percent of both the plant's 12.6 mgd remaining dry weather capacity and the plant's 58.6 mgd remaining wet weather capacity.

The existing wastewater treatment capacity of the Regional Wastewater Treatment Plant would be sufficient to accommodate the proposed project. Therefore, implementation of the proposed

project would not result in the need to expand the capacity of the Regional Wastewater Treatment Plant. The project would have a less than significant impact on wastewater capacity.

The project would require a connection to existing wastewater pipelines. Construction required to complete this connection would occur on the project site and on adjacent public streets which would have a minimal impact. The proposed project would not result in significant environmental effects because of new or expanded wastewater treatment construction or relocation.

Electricity and Natural Gas

Electricity services in the project vicinity are provided by PG&E and 3CE. The project would require a utility connection to existing electrical transmission and distribution systems on Gigling Road to serve the project site. This service would be provided in accordance with the rules and regulations of PG&E and 3CE on file with and approved by CPUC. The construction of electrical lines has been evaluated in context with other physical effects on the environment in applicable sections of this Initial Study. Impacts regarding electric power demand are discussed in Environmental Checklist Section 6, *Energy*.

Natural gas services in the project vicinity are provided by PG&E. A large-diameter gas transmission pipeline runs along SR 1, approximately 600 feet northwest of the project site (PG&E 2023). The precise sizing and placement of gas transmission pipelines would be submitted concurrent with the final tract map and improvement plan. Construction of natural gas transmission pipelines would occur within developed areas, such as street corridors, that already contain underground infrastructure for utilities. Natural gas transmission pipelines are typically co-located with underground water pipelines. The proposed project would not result in significant impacts from construction or relocation of new or expanded natural gas utilities.

Telecommunication

Existing utility lines adjacent to the project site would be utilized by the project for telecommunications services. Telephone and cable utility plans would be submitted concurrent with the final site plans. Telephone and cable lines are typically co-located with electricity lines. The proposed project would not result in significant impacts from construction or relocation of new or expanded telecommunications utilities.

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- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

As discussed in *criterion a and c*, the proposed project would have a water demand of less than 5 AFY. The project site is serviced by MCWD, which provides water service to a portion of the City of Seaside, including the project site. MCWD provides groundwater from the Monterey Subbasin of the Salinas Valley Groundwater Basin, as well as recycled water and desalinated water. Because MCWD does not rely on surface water, water supply availability during drought conditions is only marginally affected during a 5-year drought (MCWD 2021). The Salinas Valley Groundwater Basin has a large storage volume and is recharged by the Salinas River, which is augmented by upstream reservoirs. Consequently, the aquifer does not experience wide level variations due to climatic conditions. Water levels vary by 20 to 30 feet seasonally and decline an additional 10 to 20 feet during drought periods. MCWD's demands accounted for less than one percent of the total groundwater pumped

from the Salinas groundwater basin in 2020, the latest year reported. Therefore, the MCWD’s supply is considered reliable on a quantity basis.

The MCWD’s 2020 Urban Water Management Plan (UWMP) addresses MCWD’s water system and includes descriptions of water supply sources, water use, comparisons of supply and demand during dry years, etc. Per the UWMP, average year, single dry year, and multiple dry year supply and demand comparisons are shown below in Table 25.

Table 25 Estimated Water Demands in Normal and Dry Years in Acre-Feet per Year

Year Type	2020	2025	2030	2035	2040
Average	3,367	5,991	7,792	8,869	9,574
Single Dry	3,434	6,111	7,948	9,046	9,765
Multiple Dry First Year	3,434	6,111	7,948	9,046	9,765
Multiple Dry Second Year	3,030	5,392	7,013	7,982	8,616
Multiple Dry Third Year	2,660	4,733	6,156	7,006	7,563
Multiple Dry Fourth Year	2,593	4,613	6,000	6,829	7,372
Multiple Dry Fifth Year	2,593	4,613	6,000	6,829	7,372

Source: MCWD 2021.

As described above, MCWD projects an adequate water supply for all projected demands during normal, single, and multiple dry year conditions (MCWD 2021). MCWD would serve the project site through existing utilities located within adjacent roadways. The project would include a fire station and training facility on the project site. The project’s estimated water demand would be less than 5 AFY, as described under criterion a and c. The project’s water demand would represent less than 0.2 percent of the lowest projected MCWD water demand. Furthermore, MCWD’s Urban Water Management Plan identifies the project site as a future supply area, and anticipated development of the site in the future year water demand scenario provided in Table 25. Based on the project’s incremental contribution to future demand, new sources of water supply would not be required to meet project water needs. This impact would be less than significant.

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- d. *Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?*
- e. *Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

The City currently contracts with GreenWaste Recovery, a private hauler to provide trash, recycling and yard waste collection services to residents and commercial businesses within the City. Nearly all solid waste generated in Seaside is transported to and disposed of at the Monterey Peninsula Landfill and Materials Recovery Facility, which is operated by ReGen Monterey.

According to the Solid Waste Facility Permit for the Monterey Peninsula Landfill (CalRecycle 2011), the peak tonnage of incoming waste shall not exceed 3,500 tons per day. The maximum permitted capacity of the landfill is 49.7 million cubic yards, and the landfill has a remaining capacity of 48,560,000 million cubic yards, with an expected closure date of 2107 (CalRecycle 2019). The proposed project would yield an annual solid waste generation rate of approximately 76.3 tons per

year or about 0.2 tons per day as shown in Table 26. This accounts for approximately 0.006 percent of the maximum daily throughput and less than 0.001 percent of the remaining capacity of the Monterey Peninsula Landfill.

Table 26 Estimated Solid Waste Generation

Land Use	Size	Generation Rate*	Total (ton/year)	Total (ton/day)
Government (Civic Center)	13,000 sf	5.7 ton/1,000 sf /year	74.2	0.2
General Office Building	2,300 sf	0.93 ton/1,000 sf/year	2.1	0.006
Total			76.3	0.206

Note: sf = square feet

Source: CalEEMod outputs in Appendix A

* Rates from CalEEMod.

In addition, the City of Seaside is required by AB 939 to divert 50 percent of solid waste from landfills. The Materials Recovery Facility can recover up to 75 percent or more of the mixed waste stream from both commercial and multi-family sources, single-stream recyclables, as well as construction and demolition loads (ReGen 2018). Local infrastructure would have the capacity to accommodate solid waste generated by the proposed project. The proposed project would be required to demonstrate compliance with all applicable regulations. Projected rates of solid waste disposal from the proposed project would have a less than significant impact on local solid waste infrastructure.

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located in an urbanized area that is not within a very high fire hazard severity zone or a State Responsibility Area. The site is in a Local Responsibility Area. The nearest very high fire hazard severity zone is located approximately 3.5 miles south of the project site (CAL FIRE 2022).

- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?*

Fire Station No. 2 Project

- c. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?*
- d. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

The project site is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones (CAL FIRE 2022); therefore, the project would not result in wildfire impacts. Furthermore, the project entails the construction of a new fire station and training facility on the project site, which would increase the City's capacity for wildfire response. No impact would occur.

NO IMPACT

21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

Does the project:

- | | | | | |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| <p>a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b. Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

a. *Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?*

As discussed throughout this Initial Study, the project would have no impact, a less than significant impact, or a less than significant impact after mitigation with respect to all environmental issues. Regarding biological resources, the existing habitat on site currently supports one special-status species (Monterey spineflower) and could support California legless lizard and nesting birds. Implementation of Mitigation Measures BIO-1(a) through BIO-1(e) would reduce potential impacts to special status species and nesting birds to a less than significant level by requiring Monterey spineflower avoidance and minimization measures, preparation of a habitat mitigation and

monitoring plan that would involve habitat restoration or compensatory mitigation, implementation of a worker environmental awareness program, implementation of a California legless lizard pre-construction survey and relocation measures, and implementation of a pre-construction besting bird survey and avoidance measures. Additionally, the project site is small in comparison to the range of these special-status species, and project impacts would not cause a fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or substantially restrict the range of these species. Therefore, impacts would be less than significant.

No historical or archeological resources are known to occur at the project site, as stated in Environmental Checklist Section 5, *Cultural Resources*. Potential impacts to unknown prehistoric archeological sites on the project site would be less than significant as a result of compliance with the requirements of Conditions of Approval CR-1 and TCR-1 through TCR-3, which would require notification and appropriate protective measures in the event of an unanticipated discovery of cultural or tribal cultural resources. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

As described in Environmental Checklist Sections 1 through 20, the proposed project would not result in significant and unmitigable impacts to the environment with respect to all environmental issues. Cumulative impacts could occur if the construction of other projects occurs at the same time as the proposed project and in the same geographic scope, such that the effects of similar impacts of multiple projects combine to create greater levels of impact than would occur at the project-level. For example, if the construction of other projects in the area occurs at the same time as project activities, combined air quality and noise impacts may be greater than at the project-level.

Five development projects are planned to occur within approximately two miles of the project, which are summarized in Table 27. The exact implementation timing of these projects is not known at this time; therefore, it is conservatively assumed that construction of these planned projects could overlap with construction of the proposed project.

Table 27 Cumulative Development Projects

No.	Project Name	Project Location	Project Components	Status
1	Campus Town Specific Plan	122 acres at the northern end of Seaside, bounded generally by 1st Avenue, 7th Avenue, Lightfighter Drive, and Gigling Road; north and west of project site	1,485 housing units; 250 hotel rooms; 75 youth hostel beds; 150,000 square feet of retail dining, and entertainment uses; up to 50,000 square feet of office, flex, or makerspace; park/recreation areas; and supporting infrastructure.	Specific Plan adopted and Final EIR certified in March 2020
2	Fort Ord Courthouse	5-acre project site west of 2nd Avenue and south of City of Marina limits, 0.6 mile northeast of the project site	Three-story, 83,000 square foot courthouse and 280 parking spaces.	Construction estimated to begin in May 2025

No.	Project Name	Project Location	Project Components	Status
3	Seaside Senior Living Project	5.5-acre project site north of Monterey Road, 1.5 miles southwest of project site	Demolition of an existing 5,000 square foot structure and the development of two residential care facility buildings.	Demolition complete; construction not yet started
4	California State University – Monterey Bay (CSUMB) 2022 Campus Master Plan	CSUMB campus, 0.4 mile northeast of the project site	Land use planning effort to expand student and faculty housing, academic and administration facilities, a charter school, athletic facilities, and open space.	Master Plan adopted and Final EIR certified in 2022
5	Fort Ord Regional Trail and Greenway (FORTAG)	Seaside, Del Rey Oaks, Marina, Monterey County, and Fort Ord National Monument; CSUMB Loop South Segment 0.5 mile northeast of project site	28-mile paved bicycle and pedestrian trail connecting to the existing Monterey Bay Sanctuary Scenic Trail and unpaved trails within Fort Ord National Monument.	Conceptual Design Report and Final EIR completed in 2020; Addenda to the Final EIR for Phase I completed in January 2023

Source: City of Seaside 2022; CSUMB 2022b; Transportation Agency for Monterey County 2023

Project impacts are primarily temporary, localized effects that would occur during construction activities. Therefore, the potential for the project to contribute to cumulative impacts would be limited to the infrequent periods of project activities and the following issue areas which are associated with the greatest construction impacts:

- **Air Quality.** Because the NCCAB is designated nonattainment-transitional for the ozone CAAQS and nonattainment for the PM₁₀ CAAQS, cumulative air quality impacts currently exist for these pollutants. As discussed in the Environmental Checklist Section 3, *Air Quality*, project construction activities would not generate emissions of this air pollutant exceeding MBARD significance thresholds, which are intended to assess whether a project’s contribution to existing cumulative air quality impacts is considerable. Therefore, the project’s contribution to cumulative air quality impacts would not be cumulatively considerable.
- **Biological Resources.** Development facilitated by the proposed project and the projects listed above would include elements that have the potential to result in significant impacts to special-status plant and wildlife species, sensitive natural communities, and/or federally and state-protected waters. However, each cumulative project listed above has undergone CEQA review to identify the extent of these biological resources impacts and to mitigate those impacts appropriately. Given the uncertainty in the extent of impacts associated with these projects, this analysis conservatively assumes a significant cumulative impact to biological resources would occur. Nevertheless, the proposed project would be required to implement Mitigation Measures BIO-1(a) through BIO-1(e) to reduce its impacts to biological resources to a less than significant level such that project-level impacts would not result in a cumulatively considerable contribution to this cumulative impact.
- **Cultural and Tribal Cultural Resources.** Cumulative development in the region would continue to disturb areas with the potential to contain cultural and tribal cultural resources. Some projects listed above would occur within previously developed sites with low potential to impact cultural resources. In addition, as mentioned above, all cumulative development projects have undergone CEQA review, which determined the extent of potential cultural and tribal cultural resources impacts and mitigated impacts as required. If these cumulative projects would result

in impacts to known or unknown cultural or tribal cultural resources, impacts to such resources would be addressed on a case-by-case basis. However, given the uncertainty in the extent of impacts associated with these projects, this analysis conservatively assumes a significant cumulative impact to cultural and tribal cultural resources would occur. Nevertheless, the proposed project would be required to implement Conditions of Approval CR-1 and TCR-1 through TCR-3, which would ensure that impacts to cultural and tribal cultural resources are less than significant, such that project-level impacts would not result in a cumulatively considerable contribution to this cumulative impact.

- **Greenhouse Gas Emissions.** GHG emissions and climate change are, by definition, cumulative impacts. As discussed in Environmental Checklist Section 8, *Greenhouse Gas Emissions*, the proposed project would be consistent with CARB's 2022 Scoping Plan and would therefore not result in a cumulative contribution to cumulative GHG impacts.
- **Noise.** Overlapping construction activities associated with cumulative development projects in conjunction with proposed project activities could result in cumulative noise impacts related to a temporary increase in ambient noise levels at the same noise-sensitive receivers located throughout the area, especially during construction activities. However, similar to the proposed project, cumulative development projects would be subject to compliance with the noise level limits established in the SMC and the General Plan. Therefore, no cumulative construction noise impact would occur.

Given the above discussion, the project would not result in a cumulatively considerable contribution to a significant cumulative impact with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

- c. *Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in Environmental Checklist Section 3, *Air Quality*, and Environmental Checklist Section 13, *Noise*, the project would not result, either directly or indirectly, in significant air quality or noise impacts with implementation of Mitigation Measures AQ-2 and NOI-1. Similarly, as discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials*, the project would not result in any adverse hazards related to hazardous materials. Compliance with applicable rules and regulations related to hazards and hazardous materials would reduce potential impacts on human beings to a less than significant level. Impacts to human beings would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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Appendix A

CalEEMod Modeling Results

Fire Station No. 2 Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Fire Station No. 2
Construction Start Date	8/15/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.80
Precipitation (days)	32.6
Location	36.645139117313406, -121.81404963155653
County	Monterey
City	Seaside
Air District	Monterey Bay ARD
Air Basin	North Central Coast
TAZ	3263
EDFZ	6
Electric Utility	Pacific Gas & Electric Company
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
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Government (Civic Center)	13.0	1000sqft	3.87	13,010	49,680	0.00	—	—
Parking Lot	32.0	Space	0.00	0.00	0.00	0.00	—	—
Other Asphalt Surfaces	54.1	1000sqft	0.00	0.00	0.00	0.00	—	—
General Office Building	2.30	1000sqft	0.00	2,300	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.50	59.5	64.1	0.10	2.55	10.7	13.3	2.34	5.34	7.69	—	11,138	11,138	0.46	0.11	1.32	11,184
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.11	29.7	33.0	0.05	1.34	2.92	4.25	1.23	1.37	2.60	—	5,708	5,708	0.24	0.06	0.02	5,732
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.96	14.1	16.8	0.03	0.60	1.44	2.04	0.55	0.69	1.24	—	2,899	2,899	0.12	0.03	0.19	2,911
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.36	2.56	3.06	< 0.005	0.11	0.26	0.37	0.10	0.13	0.23	—	480	480	0.02	0.01	0.03	482

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	5.71	54.3	53.4	0.08	2.44	10.7	13.1	2.24	5.33	7.57	—	8,520	8,520	0.35	0.08	1.10	8,553
2025	7.50	59.5	64.1	0.10	2.55	10.7	13.3	2.34	5.34	7.69	—	11,138	11,138	0.46	0.11	1.32	11,184
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.20	29.7	32.9	0.05	1.34	2.91	4.25	1.23	1.37	2.60	—	5,570	5,570	0.23	0.06	0.02	5,594
2025	4.11	27.8	33.0	0.05	1.18	2.92	4.10	1.09	1.37	2.46	—	5,708	5,708	0.24	0.06	0.02	5,732
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.68	6.42	6.60	0.01	0.29	1.08	1.37	0.27	0.53	0.79	—	1,062	1,062	0.04	0.01	0.07	1,066
2025	1.96	14.1	16.8	0.03	0.60	1.44	2.04	0.55	0.69	1.24	—	2,899	2,899	0.12	0.03	0.19	2,911
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.12	1.17	1.20	< 0.005	0.05	0.20	0.25	0.05	0.10	0.14	—	176	176	0.01	< 0.005	0.01	177
2025	0.36	2.56	3.06	< 0.005	0.11	0.26	0.37	0.10	0.13	0.23	—	480	480	0.02	0.01	0.03	482

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.99	1.07	3.41	0.01	0.05	0.30	0.35	0.05	0.08	0.13	46.9	807	854	4.76	0.04	1.50	985

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.87	1.10	2.77	0.01	0.05	0.30	0.35	0.05	0.08	0.13	46.9	788	835	4.77	0.04	0.08	966
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.62	0.32	1.76	< 0.005	0.01	0.21	0.23	0.01	0.05	0.07	46.9	562	609	4.75	0.03	0.49	738
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.11	0.06	0.32	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	7.76	93.1	101	0.79	0.01	0.08	122

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.25	0.20	1.67	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	364	364	0.02	0.02	1.46	371
Area	0.46	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.74	2.74	< 0.005	< 0.005	—	2.75
Energy	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	289	289	0.04	< 0.005	—	291
Water	—	—	—	—	—	—	—	—	—	—	5.74	10.3	16.0	0.59	0.01	—	35.0
Waste	—	—	—	—	—	—	—	—	—	—	41.1	0.00	41.1	4.11	0.00	—	144
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Stationary	0.27	0.77	1.00	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	141	141	0.01	< 0.005	0.00	141
Total	0.99	1.07	3.41	0.01	0.05	0.30	0.35	0.05	0.08	0.13	46.9	807	854	4.76	0.04	1.50	985
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.24	0.24	1.70	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	348	348	0.02	0.02	0.04	354

Area	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	289	289	0.04	< 0.005	—	291
Water	—	—	—	—	—	—	—	—	—	—	5.74	10.3	16.0	0.59	0.01	—	35.0
Waste	—	—	—	—	—	—	—	—	—	—	41.1	0.00	41.1	4.11	0.00	—	144
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Stationary	0.27	0.77	1.00	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	141	141	0.01	< 0.005	0.00	141
Total	0.87	1.10	2.77	0.01	0.05	0.30	0.35	0.05	0.08	0.13	46.9	788	835	4.77	0.04	0.08	966
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.17	0.16	1.14	< 0.005	< 0.005	0.21	0.22	< 0.005	0.05	0.06	—	249	249	0.01	0.01	0.45	254
Area	0.43	< 0.005	0.46	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.88	1.88	< 0.005	< 0.005	—	1.88
Energy	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	289	289	0.04	< 0.005	—	291
Water	—	—	—	—	—	—	—	—	—	—	5.74	10.3	16.0	0.59	0.01	—	35.0
Waste	—	—	—	—	—	—	—	—	—	—	41.1	0.00	41.1	4.11	0.00	—	144
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Stationary	0.02	0.06	0.08	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	11.6	11.6	< 0.005	< 0.005	0.00	11.6
Total	0.62	0.32	1.76	< 0.005	0.01	0.21	0.23	0.01	0.05	0.07	46.9	562	609	4.75	0.03	0.49	738
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.03	0.03	0.21	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	41.3	41.3	< 0.005	< 0.005	0.07	42.1
Area	0.08	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.31
Energy	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	47.9	47.9	0.01	< 0.005	—	48.3
Water	—	—	—	—	—	—	—	—	—	—	0.95	1.71	2.66	0.10	< 0.005	—	5.80
Waste	—	—	—	—	—	—	—	—	—	—	6.81	0.00	6.81	0.68	0.00	—	23.8
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Stationary	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	1.91	1.91	< 0.005	< 0.005	0.00	1.92
Total	0.11	0.06	0.32	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	7.76	93.1	101	0.79	0.01	0.08	122

3. Construction Emissions Details

3.1. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	2.17	1.98	< 0.005	0.10	—	0.10	0.09	—	0.09	—	319	319	0.01	< 0.005	—	320
Dust From Material Movement	—	—	—	—	—	0.46	0.46	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.40	0.36	< 0.005	0.02	—	0.02	0.02	—	0.02	—	52.8	52.8	< 0.005	< 0.005	—	53.0

Dust From Material Movement	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.06	0.86	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	129	129	0.01	0.01	0.56	131
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.36	7.36	< 0.005	< 0.005	0.01	7.48
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.22	1.22	< 0.005	< 0.005	< 0.005	1.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.31	31.6	30.2	0.05	1.37	—	1.37	1.26	—	1.26	—	5,295	5,295	0.21	0.04	—	5,314
Dust From Material Movement	—	—	—	—	—	7.67	7.67	—	3.94	3.94	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.20	1.91	1.82	< 0.005	0.08	—	0.08	0.08	—	0.08	—	319	319	0.01	< 0.005	—	320
Dust From Material Movement	—	—	—	—	—	0.46	0.46	—	0.24	0.24	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.35	0.33	< 0.005	0.02	—	0.02	0.01	—	0.01	—	52.8	52.8	< 0.005	< 0.005	—	53.0
Dust From Material Movement	—	—	—	—	—	0.08	0.08	—	0.04	0.04	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	0.79	0.00	0.00	0.12	0.12	0.00	0.03	0.03	—	127	127	0.01	0.01	0.52	129
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.22	7.22	< 0.005	< 0.005	0.01	7.34
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.20	1.20	< 0.005	< 0.005	< 0.005	1.22
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969

Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.40	3.85	3.98	0.01	0.18	—	0.18	0.16	—	0.16	—	625	625	0.03	0.01	—	627
Dust From Material Movement	—	—	—	—	—	0.58	0.58	—	0.28	0.28	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.07	0.70	0.73	< 0.005	0.03	—	0.03	0.03	—	0.03	—	104	104	< 0.005	< 0.005	—	104
Dust From Material Movement	—	—	—	—	—	0.11	0.11	—	0.05	0.05	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.73	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	111	111	0.01	< 0.005	0.48	113
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.7	25.7	< 0.005	< 0.005	0.05	27.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.07	0.69	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	104	104	0.01	< 0.005	0.01	106
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.7	25.7	< 0.005	< 0.005	< 0.005	27.0
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.14	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	22.1	22.1	< 0.005	< 0.005	0.04	22.5
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.43	5.43	< 0.005	< 0.005	< 0.005	5.71
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	3.66	3.66	< 0.005	< 0.005	0.01	3.72
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.90	0.90	< 0.005	< 0.005	< 0.005	0.94

3.7. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Dust From Material Movement	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	5.25	5.78	0.01	0.23	—	0.23	0.21	—	0.21	—	956	956	0.04	0.01	—	959
Dust From Material Movement	—	—	—	—	—	0.89	0.89	—	0.43	0.43	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.96	1.06	< 0.005	0.04	—	0.04	0.04	—	0.04	—	158	158	0.01	< 0.005	—	159
Dust From Material Movement	—	—	—	—	—	0.16	0.16	—	0.08	0.08	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.68	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	108	108	0.01	< 0.005	0.45	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	0.05	26.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.65	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	102	102	0.01	< 0.005	0.01	104
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.2	25.2	< 0.005	< 0.005	< 0.005	26.5
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.2	33.2	< 0.005	< 0.005	0.06	33.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.14	8.14	< 0.005	< 0.005	0.01	8.55
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.49	5.49	< 0.005	< 0.005	0.01	5.58
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.35	1.35	< 0.005	< 0.005	< 0.005	1.42

3.9. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.20	11.2	13.1	0.02	0.50	—	0.50	0.46	—	0.46	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.37	0.44	< 0.005	0.02	—	0.02	0.02	—	0.02	—	79.8	79.8	< 0.005	< 0.005	—	80.0
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.07	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.2	13.2	< 0.005	< 0.005	—	13.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	34.0	34.0	< 0.005	< 0.005	< 0.005	34.5
Vendor	< 0.005	0.08	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	50.4	50.4	< 0.005	0.01	< 0.005	52.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.14	1.14	< 0.005	< 0.005	< 0.005	1.16
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.68	1.68	< 0.005	< 0.005	< 0.005	1.75
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.19	0.19	< 0.005	< 0.005	< 0.005	0.19
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.28	0.28	< 0.005	< 0.005	< 0.005	0.29
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.57	5.27	6.58	0.01	0.22	—	0.22	0.20	—	0.20	—	1,211	1,211	0.05	0.01	—	1,215

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.96	1.20	< 0.005	0.04	—	0.04	0.04	—	0.04	—	200	200	0.01	< 0.005	—	201
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.22	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	35.4	35.4	< 0.005	< 0.005	0.15	36.0
Vendor	< 0.005	0.07	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.5	49.5	< 0.005	0.01	0.13	51.8
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.21	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	33.4	33.4	< 0.005	< 0.005	< 0.005	33.9
Vendor	< 0.005	0.08	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	49.5	49.5	< 0.005	0.01	< 0.005	51.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.10	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.9	16.9	< 0.005	< 0.005	0.03	17.2
Vendor	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	25.0	25.0	< 0.005	< 0.005	0.03	26.1
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.80	2.80	< 0.005	< 0.005	0.01	2.85
Vendor	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.14	4.14	< 0.005	< 0.005	< 0.005	4.32
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.71	6.52	8.84	0.01	0.29	—	0.29	0.26	—	0.26	—	1,351	1,351	0.05	0.01	—	1,355
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.18	1.60	< 0.005	0.05	—	0.05	0.05	—	0.05	—	244	244	0.01	< 0.005	—	245
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.22	0.29	< 0.005	0.01	—	0.01	0.01	—	0.01	—	40.4	40.4	< 0.005	< 0.005	—	40.6
Paving	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.09	0.07	0.91	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	145	145	0.01	0.01	0.60	147
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.15	0.00	0.00	0.02	0.02	0.00	0.01	0.01	—	24.8	24.8	< 0.005	< 0.005	0.05	25.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.10	4.10	< 0.005	< 0.005	0.01	4.17
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	1.01	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.34	0.44	< 0.005	0.01	—	0.01	0.01	—	0.01	—	51.6	51.6	< 0.005	< 0.005	—	51.8
Architectural Coatings	0.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.06	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.54	8.54	< 0.005	< 0.005	—	8.57
Architectural Coatings	0.07	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.08	7.08	< 0.005	< 0.005	0.03	7.21
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	6.68	6.68	< 0.005	< 0.005	< 0.005	6.78
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.59	2.59	< 0.005	< 0.005	< 0.005	2.63
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.43	0.43	< 0.005	< 0.005	< 0.005	0.44
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	0.25	0.20	1.67	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	364	364	0.02	0.02	1.46	371

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.25	0.20	1.67	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	364	364	0.02	0.02	1.46	371
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	0.24	0.24	1.70	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	348	348	0.02	0.02	0.04	354
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.24	0.24	1.70	< 0.005	< 0.005	0.30	0.30	< 0.005	0.08	0.08	—	348	348	0.02	0.02	0.04	354
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	0.03	0.03	0.21	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	41.3	41.3	< 0.005	< 0.005	0.07	42.1
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	
Total	0.03	0.03	0.21	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	—	41.3	41.3	< 0.005	< 0.005	0.07	42.1

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	152	152	0.02	< 0.005	—	153
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	26.8	26.8	< 0.005	< 0.005	—	27.1
Total	—	—	—	—	—	—	—	—	—	—	—	179	179	0.03	< 0.005	—	180
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	152	152	0.02	< 0.005	—	153

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	26.8	26.8	< 0.005	< 0.005	—	27.1
Total	—	—	—	—	—	—	—	—	—	—	—	179	179	0.03	< 0.005	—	180
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	25.1	25.1	< 0.005	< 0.005	—	25.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	—	4.44	4.44	< 0.005	< 0.005	—	4.49
Total	—	—	—	—	—	—	—	—	—	—	—	29.6	29.6	< 0.005	< 0.005	—	29.9

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.2	94.2	0.01	< 0.005	—	94.4

Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Total	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	111	111	0.01	< 0.005	—	111
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	< 0.005	0.08	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.2	94.2	0.01	< 0.005	—	94.4
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
General Office Building	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	16.6	16.6	< 0.005	< 0.005	—	16.7
Total	0.01	0.09	0.08	< 0.005	0.01	—	0.01	0.01	—	0.01	—	111	111	0.01	< 0.005	—	111
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.6
Parking Lot	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

General Office Building	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.76	2.76	< 0.005	< 0.005	—	2.76
Total	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	18.3	18.3	< 0.005	< 0.005	—	18.4

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.11	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.74	2.74	< 0.005	< 0.005	—	2.75
Total	0.46	0.01	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.74	2.74	< 0.005	< 0.005	—	2.75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.35	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	0.06	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.01	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.31
Total	0.08	< 0.005	0.08	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.31	0.31	< 0.005	< 0.005	—	0.31

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	4.95	9.07	14.0	0.51	0.01	—	30.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	0.78	1.24	2.02	0.08	< 0.005	—	4.61
Total	—	—	—	—	—	—	—	—	—	—	5.74	10.3	16.0	0.59	0.01	—	35.0

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	4.95	9.07	14.0	0.51	0.01	—	30.4
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	0.78	1.24	2.02	0.08	< 0.005	—	4.61
Total	—	—	—	—	—	—	—	—	—	—	5.74	10.3	16.0	0.59	0.01	—	35.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	0.82	1.50	2.32	0.08	< 0.005	—	5.03
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	0.13	0.20	0.33	0.01	< 0.005	—	0.76
Total	—	—	—	—	—	—	—	—	—	—	0.95	1.71	2.66	0.10	< 0.005	—	5.80

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	3.99	0.00	—	140
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03
Total	—	—	—	—	—	—	—	—	—	—	41.1	0.00	41.1	4.11	0.00	—	144
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	40.0	0.00	40.0	3.99	0.00	—	140
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	1.15	0.00	1.15	0.12	0.00	—	4.03
Total	—	—	—	—	—	—	—	—	—	—	41.1	0.00	41.1	4.11	0.00	—	144
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	6.62	0.00	6.62	0.66	0.00	—	23.2
Parking Lot	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
General Office Building	—	—	—	—	—	—	—	—	—	—	0.19	0.00	0.19	0.02	0.00	—	0.67
Total	—	—	—	—	—	—	—	—	—	—	6.81	0.00	6.81	0.68	0.00	—	23.8

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.03	0.03
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.04	0.04
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Government (Civic Center)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	< 0.005	< 0.005
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.27	0.77	1.00	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	141	141	0.01	< 0.005	0.00	141
Total	0.27	0.77	1.00	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	141	141	0.01	< 0.005	0.00	141
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	0.27	0.77	1.00	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	141	141	0.01	< 0.005	0.00	141
Total	0.27	0.77	1.00	< 0.005	0.04	0.00	0.04	0.04	0.00	0.04	0.00	141	141	0.01	< 0.005	0.00	141
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Emergency Generator	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	1.91	1.91	< 0.005	< 0.005	0.00	1.92
Total	< 0.005	0.01	0.01	< 0.005	< 0.005	0.00	< 0.005	< 0.005	0.00	< 0.005	0.00	1.91	1.91	< 0.005	< 0.005	0.00	1.92

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Site Preparation I	Site Preparation	8/15/2024	9/15/2024	5.00	22.0	—

Site Preparation II	Site Preparation	5/1/2025	5/30/2025	5.00	22.0	—
Grading	Grading	9/15/2024	6/14/2025	5.00	195	—
Building Construction	Building Construction	12/15/2024	9/15/2025	5.00	196	—
Paving	Paving	6/15/2025	9/15/2025	5.00	66.0	—
Architectural Coating	Architectural Coating	3/1/2025	9/15/2025	5.00	141	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation I	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation I	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Site Preparation II	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation II	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Cement and Mortar Mixers	Diesel	Average	2.00	6.00	10.0	0.56

Paving	Pavers	Diesel	Average	1.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	6.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	6.00	36.0	0.38
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation I	—	—	—	—
Site Preparation I	Worker	17.5	9.47	LDA,LDT1,LDT2
Site Preparation I	Vendor	0.00	6.03	HHDT,MHDT
Site Preparation I	Hauling	0.00	20.0	HHDT
Site Preparation I	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	9.47	LDA,LDT1,LDT2
Grading	Vendor	0.00	6.03	HHDT,MHDT
Grading	Hauling	0.96	7.00	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	4.90	9.47	LDA,LDT1,LDT2
Building Construction	Vendor	2.51	6.03	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	20.0	9.47	LDA,LDT1,LDT2

Paving	Vendor	0.00	6.03	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	0.98	9.47	LDA,LDT1,LDT2
Architectural Coating	Vendor	0.00	6.03	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT
Site Preparation II	—	—	—	—
Site Preparation II	Worker	17.5	9.47	LDA,LDT1,LDT2
Site Preparation II	Vendor	—	6.03	HHDT,MHDT
Site Preparation II	Hauling	0.00	20.0	HHDT
Site Preparation II	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	22,965	7,655	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Site Preparation I	0.00	0.00	33.0	0.00	—
Site Preparation II	0.00	0.00	33.0	0.00	—
Grading	1,500	0.00	195	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Government (Civic Center)	0.00	0%
Parking Lot	0.00	100%
Other Asphalt Surfaces	0.00	100%
General Office Building	0.00	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	204	0.03	< 0.005
2025	0.00	204	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Government (Civic Center)	60.0	0.00	0.00	15,643	422	0.00	0.00	109,977
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
General Office Building	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	22,965	7,655	—

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Government (Civic Center)	271,537	204	0.0330	0.0040	293,869
Parking Lot	0.00	204	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	204	0.0330	0.0040	0.00
General Office Building	48,004	204	0.0330	0.0040	51,952

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Government (Civic Center)	2,584,563	581,379
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
General Office Building	408,788	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Government (Civic Center)	74.2	—
Parking Lot	0.00	—
Other Asphalt Surfaces	0.00	—
General Office Building	2.14	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Government (Civic Center)	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Government (Civic Center)	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Emergency Generator	Diesel	1.00	1.00	30.0	168	0.73

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
----------------	-----------------------------	------

Temperature and Extreme Heat	5.94	annual days of extreme heat
Extreme Precipitation	1.95	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	19.8	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	N/A	N/A	N/A	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	10.6
AQ-PM	1.61
AQ-DPM	19.9
Drinking Water	57.2
Lead Risk Housing	49.4

Pesticides	81.8
Toxic Releases	5.65
Traffic	67.0
Effect Indicators	—
CleanUp Sites	83.2
Groundwater	83.7
Haz Waste Facilities/Generators	31.4
Impaired Water Bodies	94.6
Solid Waste	83.3
Sensitive Population	—
Asthma	72.3
Cardio-vascular	46.9
Low Birth Weights	14.2
Socioeconomic Factor Indicators	—
Education	30.4
Housing	69.2
Linguistic	5.64
Poverty	46.2
Unemployment	44.4

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	39.98460157
Employed	2.502245605
Median HI	44.62979597

Education	—
Bachelor's or higher	66.94469396
High school enrollment	100
Preschool enrollment	28.89772873
Transportation	—
Auto Access	89.83703323
Active commuting	81.23957398
Social	—
2-parent households	88.00205312
Voting	47.42717824
Neighborhood	—
Alcohol availability	93.28884897
Park access	57.64147312
Retail density	11.48466573
Supermarket access	16.50198896
Tree canopy	86.19273707
Housing	—
Homeownership	4.465546003
Housing habitability	57.52598486
Low-inc homeowner severe housing cost burden	99.12742205
Low-inc renter severe housing cost burden	64.37828821
Uncrowded housing	62.77428461
Health Outcomes	—
Insured adults	63.35172591
Arthritis	0.0
Asthma ER Admissions	33.1
High Blood Pressure	0.0

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	85.9
Cognitively Disabled	66.4
Physically Disabled	71.5
Heart Attack ER Admissions	61.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	40.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	0.1
Elderly	96.9
English Speaking	63.4
Foreign-born	18.1
Outdoor Workers	80.0

Climate Change Adaptive Capacity	—
Impervious Surface Cover	87.5
Traffic Density	56.6
Traffic Access	0.0
Other Indices	—
Hardship	42.1
Other Decision Support	—
2016 Voting	43.0

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	51.0
Healthy Places Index Score for Project Location (b)	46.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Based on applicant provided information
Construction: Construction Phases	Based on applicant provided information
Construction: Trips and VMT	Based on applicant provided information, haul material would be transport 7 miles to Monterey Peninsula Landfill.
Construction: Architectural Coatings	Based on MBARD Rule 426
Operations: Vehicle Data	Based on Traffic Report, approximately 60 new daily vehicles
Operations: Off-Road Equipment	Based on applicant provided information
Construction: On-Road Fugitive Dust	The project's workers, vendors, and haul trips are travelling on paved roads
Operations: Road Dust	The project would travel on paved roads

Appendix B

Transportation Analysis



MEMORANDUM

Date: June 14, 2023
To: Michael Scott and Kathryn Hicks, RRM Design Group
From: Michelle Matson and Joe Fernandez, CCTC
Subject: Seaside Fire Station Number 2 – Draft Transportation Analysis

This memorandum summarizes the transportation analysis for Seaside Fire Station Number 2 located on the northwest corner of Gigling Road/1st Avenue in the City of Seaside.

SUMMARY

The project proposes the construction of a 13,157 square-foot fire station and a 58,806 square-foot training facility. The project is expected to generate fewer than 110 net new daily trips under typical operations and would not impact intersection operations at Gigling Road/1st Avenue or be expected to significantly impact vehicle miles traveled (VMT). We recommend the following improvements at the intersection and in the project vicinity:

- Gigling Road/1st Avenue
 - Replace missing westbound STOP (R1-1) sign on Gigling Road at 1st Avenue located in the white striped median and replace the other two older STOP (R1-1) signs at the intersection.
 - Install additional westbound YIELD (R1-2) sign, YIELD pavement marking, and yield lines visible from Second Division Place.
 - Replace existing street name (D3-1) signs.
 - Install crosswalk and curb ramps on Gigling Road on west side of intersection.
- Lightfighter Drive/1st Avenue
 - Install emergency vehicle preemption.
 - Modify or replace traffic signal including additional signal heads, lighting, pedestrian accommodations, and updated signal timing for compliance with the California Manual on Uniform Traffic Control Devices (CAMUTCD) and Caltrans Traffic Manual.
 - Reduce pavement width or install island on Lightfighter Drive on west side of intersection.
 - Provide crosswalk and curb ramps on east side of intersection. Restrict pedestrians crossing on west side of intersection.
 - Replace DO NOT ENTER (R5-1), WRONG WAY (R5-1a), ONE WAY (R6-1), signal ahead (W3-3), and other older signage, as needed.
 - Improve delineation for Lightfighter Drive west of the intersection with a right turn lane drop (CAMUTCD Figure 3B-11) or lane reduction (CAMUTCD Figure 3B-14 (CA)).
- Additional Recommendations
 - Replace the two 35 MPH (R2-1) speed limit signs on 1st Avenue.
 - Construct frontage improvements including ten-foot travel lanes, seven foot parking lanes, a five foot planting strip, and a six foot sidewalk. Prohibit parking at Gigling Road/1st Avenue and project driveways consistent with the CAMUTCD.

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- Consider installing emergency vehicle preemption at other area traffic signals, as needed.

The site plan, vicinity map, and recommended improvements are shown in **Figure 1**.

The following sections summarize the trip generation, California Environmental Quality Act (CEQA) analysis, and site access and circulation.

PROJECT TRIP GENERATION

The parcel is currently vacant. The project proposes the construction of a 13,157 square-foot fire station and a 58,806 square-foot training facility including community room, sleeping quarters, restrooms, day room, kitchen, office space, turnout storage, exercise room, interior storage, two apparatus bays, exterior fueling area, and butler building. The fire station is planned to accommodate four firefighters in the near-term, with a minimum of three firefighters per shift, and seven firefighters in the long-term.

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* 11th Edition was used to estimate project trip generation for typical operations as shown in **Table 1**.

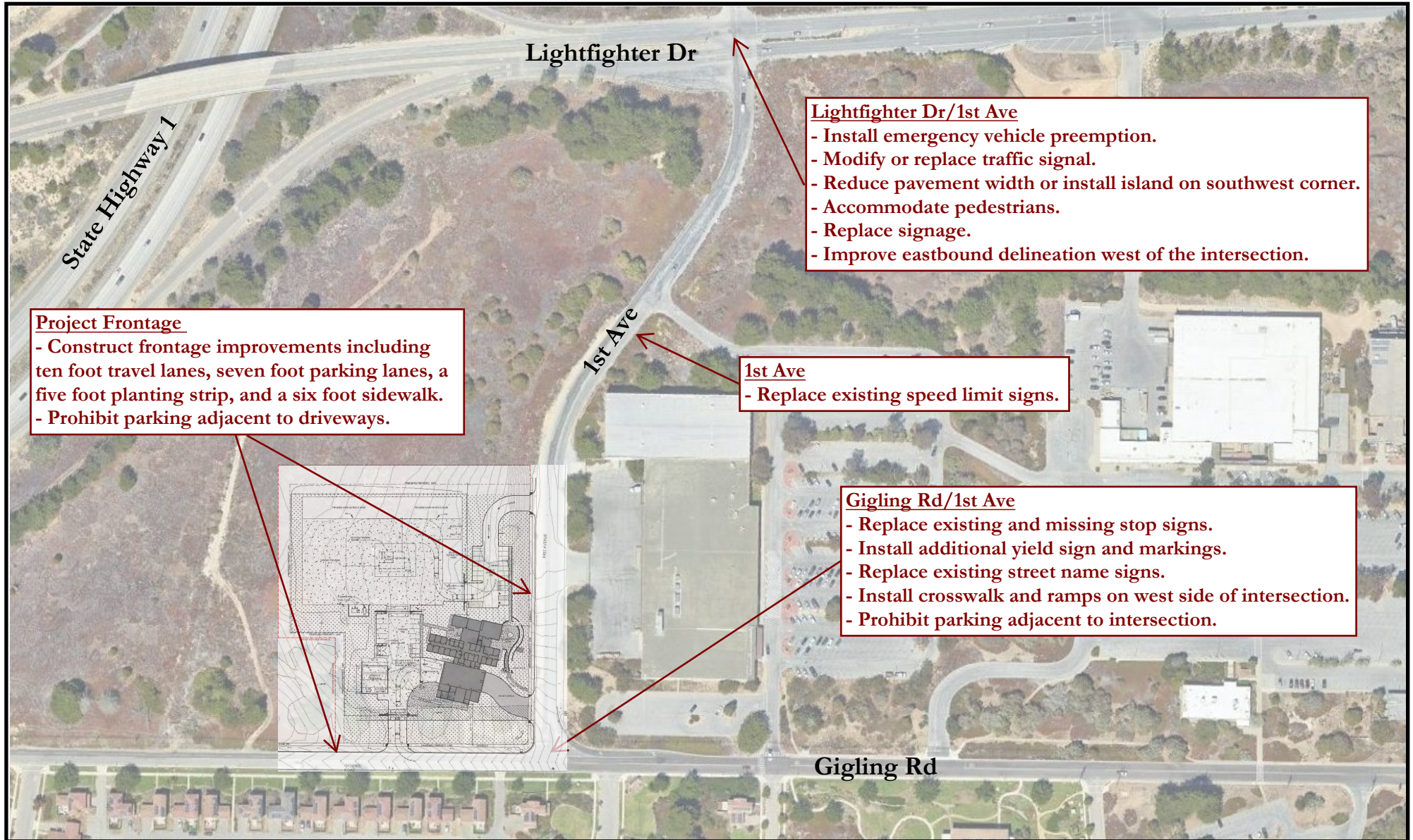
Table 1: Project Trip Generation

Project Trip Generation					
Land Use	Size	Daily	PM Peak Hour		
		Total	In	Out	Total
Fire Station ¹	13,157 SF	60	2	4	6
Total Project Trips (Typical Operations)		60	2	4	6
1. ITE Land Use Code #575, Fire and Rescue Station. Average rate used for PM peak hour. Daily assumed to be 10 times PM peak.					
Source: Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition.					

The project would generate approximately 60 new vehicle trips per weekday including six PM peak hour trips for typical fire station operations. Daily and AM peak hour trip rates were not available from ITE. The daily trip rate was assumed to be ten times the PM peak hour based on industry standards practices. Note that all traffic (garbage, deliveries, public, etc.) are included in the ITE rates.

The training center would not operate daily and was not included in the trip estimate for typical operations. The training center will be used daily by up to seven firefighters from Seaside. When monthly classes are hosted, up to 20 firefighters from Monterey County may attend. Additionally, the site could host a weeklong State Fire Marshal class where Monterey County Firefighters and Firefighters from other Regions can come and take a course. Assuming the Seaside employees would already be on site, the training center would typically add up to 20 additional firefighters. The training center could be considered an industrial use with the firefighters as employees. Using the ITE rate for Light Industrial (Land Use #110) up to 62 trips per day including 10 PM peak hour trips would be anticipated during these monthly classes.

Figure 1 - Site Plan, Vicinity Map, and Recommended Improvements



CEQA ANALYSIS

This section presents analysis relevant to the California Environmental Quality Act (CEQA), notably analysis of the existing setting, vehicle miles traveled (VMT), and safety.

Existing Setting

The existing roadways in the vicinity of the project include:

- *Lightfighter Drive* is a five-lane, east-west arterial roadway with a speed limit of 40 miles per hour (MPH) in the project vicinity. The west end of Lightfighter Drive terminates at a full access interchange with Highway 1. The intersection of Lightfighter Drive/1st Avenue is controlled by a traffic signal with central medians. There is a sidewalk on the southside east of 1st Avenue.
- *1st Avenue* is a two-lane, north-south local roadway with a 35 MPH posted speed limit. There are no pedestrian or bicycle facilities.
- *Gigling Road* is a two-lane, east-west arterial roadway with a 35 MPH posted speed limit. Gigling Road/1st Avenue is an all-way stop controlled intersection with a channelized yield-controlled right-turn lane for westbound traffic. There are pedestrian facilities along the south side of the roadway within the project vicinity. There are no bike facilities. Gigling Road will be reclassified as a collector in the Seaside 2040 General Plan. Monterey Salinas Transit Route 18 runs hourly on Gigling Road providing access between the Marina Transit Exchange and the Sand City Station.

The Monterey County Active Transportation Plan proposes future Class IV protected bike lanes on Lightfighter Drive east of 1st Avenue and a future Class III Bike Route on Gigling Road west of 1st Avenue. No bicycle facilities are currently proposed on 1st Avenue adjacent to the project site.

Vehicle Miles Traveled (VMT)

The State Office of Planning and Research (OPR) published a Technical Advisory in December 2018 with recommendations for evaluating VMT for various project types. The Technical Advisory notes that “absent substantial evidence indicating that a project would generate a potentially significant level of VMT, or inconsistency with a Sustainable Communities Strategy (SCS) or general plan, projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact.”

The City of Seaside has not adopted VMT thresholds. Many jurisdictions consider essential services that support health, safety, and welfare to be exempt from VMT analysis since their trips are non-discretionary. VMT for work-based land uses is typically analyzed per employee and does not include non-typical or emergency operations. Therefore, since the project trips are non-discretionary and generate fewer than 110 daily trips under typical operations, the project is presumed to have a less-than-significant impact on VMT.

Collision History

Traffic collision data was obtained from the Statewide Integrated Traffic Records System (SWITRS) for Lightfighter Drive, 1st Avenue, and Gigling Road. Between September 2017 and August 2022, seven collisions occurred at Lightfighter Drive/1st Avenue. Three rear-end, two sideswipe, one hit object, and one unknown collision occurred. The two sideswipe collisions occurred with eastbound drivers on Lightfighter Drive and no other collision patterns were observed. Striping improvements for eastbound Lightfighter Drive are detailed later in this report. No collisions occurred on Gigling Road or 1st Avenue within the project vicinity.

SITE ACCESS & CIRCULATION

This section summarizes the site access and circulation recommendations in the vicinity of the project.

Site Access

The project will construct two driveways on 1st Avenue and one on Gigling Road. CCTC observed the sight distance at the proposed driveway locations in March 2023. The stopping and corner sight distance was met for 35 miles per hour for the proposed driveways. Since the site visit, the northmost driveway location on 1st Street has been moved north of the eastside driveway. Based on the existing topography, it is anticipated that the stopping and corner sight distance will be met.

Gigling Road/1st Avenue

Turning movement counts were collected at the intersection of at Gigling Rd/1st Avenue from 4:00 PM to 6:00 PM in March 2023 and the intersection was also observed during the AM peak hour. No queuing was observed during the AM or PM peak hour. The stop-controlled intersection was analyzed using Synchro 11 and the Highway Capacity Manual (HCM) 6th edition methodology. All intersection approaches operate at level of service (LOS) A with less than ten seconds average delay with or without the proposed project. We recommend the older signage at the intersection be replaced as noted in the previous section.

Westbound right turning vehicles were observed traveling through the Gigling Road/1st Avenue intersection without yielding. The existing yield sign for the westbound to northbound right turn is not visible in advance of the intersection and there are no yield markings. We recommend the existing and missing stop signs at the intersection be replaced and an additional yield sign and markings be installed. Replacement of the existing street name signs at the intersection is also recommended.

The Seaside 2040 General Plan Public Draft proposes reclassifying Gigling Road adjacent to the project site as a collector. The draft plan identifies two ten foot travel lanes with seven foot parking lanes, five foot planting strips, and six foot sidewalks on both sides of the roadway requiring 56 feet of right-of-way. 1st Avenue, classified as a local street in the current and draft plan, has the same typical cross section. We recommend the project construct frontage improvements consistent with the recommended cross sections. We also recommend the project replace the two 35 MPH (R2-1) speed limit signs on 1st Avenue located near Lightfighter Drive and Gigling Road.

Per CAMUTCD guidance, “At all intersections, one stall length on each side measured from the crosswalk or end of curb return should have parking prohibited. A clearance of 6 feet measured from the curb return should be provided at alleys and driveways.” We recommend red curb and/or no parking signs be installed on 1st Avenue and Gigling Road consistent with CAMUTCD guidance.

To provide access to the existing sidewalk on the south side of Gigling Road and the commissary, a crosswalk on Gigling Road is recommend on the west side of the intersection including curb ramps.

Lightfighter Drive

The Campus Town Specific Plan Transportation Impact Analysis (Fehr & Peers, 2020) did not identify any capacity deficiencies at the Lightfighter Drive/1st Avenue intersection under Existing or Cumulative Conditions with the additional of the Specific Plan volumes.

Emergency response vehicles will use the intersection of Lightfighter Drive/1st Avenue to access State Highway 1 and other areas. The existing traffic signal is at least 25 years old and does not have visible emergency vehicle preemption. The intersection of Lightfighter Drive/General Jim Moore Boulevard also does not have

emergency vehicle preemption detectors; however, Lightfighter Drive/2nd Avenue has emergency vehicle preemption detectors. We recommend emergency vehicle preemption be installed at Lightfighter Drive/1st Avenue and other area traffic signals as needed.

The addition of emergency vehicle preemption could trigger cabinet and software upgrades and the intersection does not comply with the CAMUTCD. New signal heads, poles, lighting, pedestrian features, and other intersection improvements are recommended. At a minimum, we recommend the minimum green, yellow, and red clearance intervals be updated to comply with the CAMUTCD. We also recommend replacing the DO NOT ENTER (R5-1), WRONG WAY (R5-1a), ONE WAY (R6-1), signal ahead (W3-3), and other older signage, as needed, to meet current CAMUTCD retroreflectivity standards.

The State Highway 1 Northbound Off-ramp has two lanes beginning approximately 1,000 feet west of 1st Avenue and ending approximately 400 feet west of the intersection. Historically, the large eastbound pavement width was used to transition right turning traffic south and become stop controlled at 1st Avenue. Currently, there are no transitions in the area and without an island between the right turn and through lane, the STOP control at the traffic signal is not consistent with the CAMUTCD. The 2004 Circulation Element recommends weaving and traffic signal improvements. We recommend the delineation be improved with a right turn lane drop (CAMUTCD Figure 3B-11) or lane reduction (CAMUTCD Figure 3B-14 (CA)). We also recommend reduced pavement width or an island on Lightfighter Drive west side of intersection. We recommend providing a crosswalk and curb ramps on east side of intersection and restricting pedestrians crossing on west side of intersection.

Please let us know if you have any questions.

ATTACHMENTS

Synchro Worksheets

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Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕	↕	↕	
Traffic Vol, veh/h	18	20	21	62	117	53
Future Vol, veh/h	18	20	21	62	117	53
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	26	27	79	150	68
Number of Lanes	0	1	1	1	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.1	7.7	8.7
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	47%	0%	0%	69%
Vol Thru, %	53%	100%	0%	0%
Vol Right, %	0%	0%	100%	31%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	21	62	170
LT Vol	18	0	0	117
Through Vol	20	21	0	0
RT Vol	0	0	62	53
Lane Flow Rate	49	27	79	218
Geometry Grp	5	7	7	2
Degree of Util (X)	0.064	0.038	0.097	0.257
Departure Headway (Hd)	4.747	5.077	4.373	4.245
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	757	708	822	850
Service Time	2.763	2.79	2.086	2.256
HCM Lane V/C Ratio	0.065	0.038	0.096	0.256
HCM Control Delay	8.1	8	7.6	8.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	1

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↕	↕	↕	
Traffic Vol, veh/h	22	22	22	63	119	54
Future Vol, veh/h	22	22	22	63	119	54
Peak Hour Factor	0.78	0.78	0.78	0.78	0.78	0.78
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	28	28	28	81	153	69
Number of Lanes	0	1	1	1	1	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	1	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	1	1
HCM Control Delay	8.2	7.7	8.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1
Vol Left, %	50%	0%	0%	69%
Vol Thru, %	50%	100%	0%	0%
Vol Right, %	0%	0%	100%	31%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	22	63	173
LT Vol	22	0	0	119
Through Vol	22	22	0	0
RT Vol	0	0	63	54
Lane Flow Rate	56	28	81	222
Geometry Grp	5	7	7	2
Degree of Util (X)	0.075	0.04	0.098	0.263
Departure Headway (Hd)	4.766	5.094	4.39	4.268
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	754	705	818	845
Service Time	2.783	2.811	2.106	2.281
HCM Lane V/C Ratio	0.074	0.04	0.099	0.263
HCM Control Delay	8.2	8	7.6	8.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0.3	1.1

Appendix C

Biological Resources Assessment



Fire Station No. 2 Project

Biological Resources Assessment

prepared for

City of Seaside

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Executive Summary

This document provides the findings of a Biological Resources Assessment prepared by Rincon Consultants, Inc. (Rincon) for the proposed Fire Station No. 2 Project (project) in the City of Seaside, Monterey County, California. This report documents existing conditions near the project site and provides an assessment of potential impacts to sensitive biological resources based on proposed project activities.

The project site is located in the northwest corner of the City, at the intersection of Gigling Road and 1st Avenue, east of State Route 1. The project is located on the southeastern portion of Assessor's Parcel Number 031-151-012, within the area of the former Fort Ord military base. The project would involve construction and operation of Fire Station No. 2, which would include a fire station and training facility on approximately 6 acres of currently undeveloped land. The proposed fire station would include office, living, and general operations rooms and a covered apparatus bay with front and rear access. Training areas would potentially include a planned three to four-story training tower. Site improvements would also include construction of a fire apparatus storage building, community and staff parking areas, internal driveways, sidewalks along the site frontage and throughout the site, patios, and landscaping.

Rincon conducted a reconnaissance field survey of the Biological Study Area (BSA), including all areas of proposed development or disturbance, to document existing conditions and potential presence of sensitive biological resources. Seasonally timed botanical surveys were also conducted to determine the presence of special-status plants. No native vegetation communities are present within the BSA, and ice plant species (*Carpobrotus edulis*) are dominant. Gowen cypress (*Hesperocyparis goveniana*, federally threatened), Monterey pine (*Pinus radiata*, California Rare Plant Rank 1B.1), Monterey cypress (*Hesperocyparis macrocarpa*, California Rare Plant Rank 1B.2), and coast live oak (*Quercus agrifolia*) were observed in the BSA. Given the dominance of non-native species, isolation from native stands, and lack of trees in historical aerial imagery, trees present within the BSA are likely cultivated ornamental plantings, or offspring established or recruited from ornamental plantings.

One naturally occurring special-status plant species was observed within the BSA during seasonally timed botanical surveys: Monterey spineflower (*Chorizanthe pungens* var. *pungens*, federally threatened). A population of Monterey spineflower occurs in the BSA and construction of the proposed project would result in potentially significant impacts. Impacts to Monterey spineflower will require consultation with United States Fish and Wildlife Service (USFWS) and relocation, as required by the Fort Ord Habitat Management Plan and the associated USFWS final 2017 Programmatic Biological Opinion for the disposal and reuse of Fort Ord. With implementation of avoidance and minimization measures that include protection of populations not proposed for removal and a habitat mitigation and monitoring plan for relocated seed bank, impacts to Monterey spineflower would be less than significant.

No special-status wildlife species were observed during the reconnaissance survey. One special-status species was determined to have a moderate potential to occur in the BSA: Northern California legless lizard (*Anniella pulchra*, California species of special concern). Four special-status species were determined to have a low potential to occur in the BSA incidentally while foraging: Western bumble bee (*Bombus occidentalis*, state candidate for listing [endangered]), Crotch bumble bee (*Bombus crotchii*, state candidate for listing [endangered]), ferruginous hawk (*Buteo regalis*,

Fire Station No. 2 Project

state watch list), and white-tailed kite (*Elanus leucurus*, state fully protected). Impacts to California legless lizard could occur if individuals are present during construction; avoidance and minimization measures to conduct a preconstruction survey and provide worker environmental awareness training would reduce these impacts to less than significant. Given the low potential for occurrence and small size of the BSA, impacts to foraging wildlife would not be significant.

The project proposes to remove 30 trees, including one Gowen cypress, one Monterey pine, three Monterey cypress, and 25 coast live oaks. The City's Municipal Code (Chapter 8.54) requires replacement plantings at a 1:1 ratio based on the condition of the trees and need for the project (RRM Design Group 2023). The project would include planting of 30 replacement trees of a size and species satisfactory to the City's architectural review board. With City approval of the project landscaping plan, there would be no conflict with local policies or ordinances.

1 Introduction

Rincon Consultants, Inc. (Rincon) has prepared this Biological Resources Assessment (BRA) on behalf of the City of Seaside for the Fire Station No. 2 project (project). This report presents information on existing conditions, biological resources, jurisdictional waters, and locally protected resources at the project site. The biological evaluation herein includes the results of a background literature review, reconnaissance-level field survey, and seasonally-timed botanical surveys conducted by Rincon, and provides an assessment of potential impacts to sensitive biological resources that could result from project activities.

1.1 Project Location

The project site is located in the City of Seaside, along the southern coast of Monterey Bay in northern Monterey County (Figure 1). Seaside is bordered by the city of Marina to the north; the former Fort Ord military base, and unincorporated Monterey County to the east; the cities of Del Rey Oaks and Monterey to the south; and Sand City and the Pacific Ocean to the west. Land uses in Seaside are mostly residential (approximately 66 percent by land area), with remaining land uses consisting of commercial, industrial, institutional, and public uses, and vacant land (City of Seaside 2017). Seaside is regionally accessible via State Route 1, State Route 68, and State Route 218.

The project site is in the northern portion of the city, northwest of Gigling Road and 1st Avenue on the southeastern portion of Assessor's Parcel Number 031-151-012 (Figure 2). The site is approximately 6 acres and is currently undeveloped. The project site is located within the area of the former Fort Ord military base.

1.2 Project Description

The project would involve construction and operation of Fire Station No. 2 and would include an approximately 13,010-square-foot fire station facility and 54,106 square feet of training facilities. The proposed fire station would include office, living, and general operations rooms and a 3,048 square foot covered apparatus bay with drive through access for both bays. Training areas would consist of a 54,000-square-foot area and would potentially include a planned three to four-story training tower. Site improvements would include a 2,300-square-foot fire apparatus storage building, community and staff parking areas, internal driveways, and sidewalks along the site frontage and throughout the site, patios, and landscaping (Figure 3).

The project would involve subdivision of Assessor's Parcel Number 031-151-012 to create a new parcel that reflects the boundaries of the fire station. The new parcel would be zoned as Public/Institutional under the Seaside Zoning Code. The remainder of the parcel would remain as open space and is not a part of this project.

Figure 2 Biological Study Area



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4/21/2023 8:53:13
Fig 2 BSA

Figure 3 Project Plans



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Site preparation would involve the removal of existing vegetation within the project site, including approximately 30 mature trees. Pursuant to Seaside Municipal Code Section 8.54.060, 30 trees of a size and species satisfactory to the City’s architectural review board would be planted within the project site to replace the removed trees.

The project would include ornamental landscaping along the project site’s frontage with Gigling Road and the installation of bioretention areas. The bioretention areas would have a combined area of approximately 3,800 square feet and the capacity to treat and infiltrate 3,300 cubic feet of stormwater. The bioretention areas are sized to infiltrate the 95th percentile storm. Paved areas of the proposed project, including the four driveways, parking areas, and training area, would be gently sloped so that stormwater associated with new impervious surfaces would be directed to the bioretention areas. Pursuant to Seaside Municipal Code Section 18.02.070, the project would be required to maintain or enhance on-site stormwater infiltration and would retain 100 percent of runoff on-site.

1.2.1 Construction

Project construction would occur over approximately 1 year from August 2024 to September 2025. The project would be constructed in five phases, outlined in Table 1, and described further below.

Table 1 Proposed Construction Schedule

Construction Phase	Duration	Approximate Start and End Dates
Site Preparation (completed in two phases)	August 2024	September 2024
	May 2025	June 2025
Grading	September 2024	June 2025
Building Construction	December 2024	September 2025
Asphalt Paving	June 2025	September 2025
Paving/Architectural Coating	March 2025	September 2025

Construction work would occur Monday through Friday, from approximately 7:00 a.m. to 4:00 p.m. Weekend construction is not anticipated. Construction equipment would be staged on-site, and workers would also park on-site.

1.2.2 Operation

In operation, the fire station would have the capacity to accommodate up to eight full-time firefighters to provide fire protection service to the city of Seaside. The training facility would allow Seaside Fire Department to conduct in-house and countywide training activities. The fire station would be operational full time, initially staffed with a minimum of three full-time firefighters but up to five firefighters could be added.

The training area of the proposed project would accommodate training activities for current and prospective firefighters and would be used for vehicle extrication training with the use of gas-powered tools, driver training, and hose drills. A training tower potentially would be added to the training area of the proposed fire station in a future project phase. Training activities associated with the tower would include live fire training, emergency access and rescue training, and evacuation training.

1.3 Regulatory Summary

Regulated or sensitive resources studied and analyzed herein include special-status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement corridors, regionally protected resources (e.g., from countywide Habitat Conservation Plans [HCP] and Natural Community Conservation Plans [NCCP]), and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Seaside).

1.3.1 Definition of Special-Status Species

For the purpose of this report, special-status species include:

- Species listed as threatened or endangered under the Federal Endangered Species Act (FESA), including proposed and candidate species
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected by the California Fish and Game Code (CFGC), and Species of Special Concern or Watch List by the California Department of Fish and Wildlife (CDFW)
- Native Plant Protection Act (NPPA) – State Rare (SR)
- California Native Plant Society California Rare Plant Ranks (CRPR) 1A, 1B, 2A and 2B
- Species designated as locally important by the local agency and/or otherwise protected through ordinance, local policy, or HCPs/NCCPs

1.3.2 Environmental Statutes

Potential impacts to biological resources were analyzed based on the following statutes (definitions in Appendix A):

- Federal Clean Water Act (CWA)
- Porter-Cologne Water Quality Control Act
- FESA
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act (BGEPA)
- CESA
- CFGC
- City of Seaside General Plan
- Seaside Municipal Code (Chapter 8.54, Trees)
- Fort Ord Habitat Management Plan (HMP) and United States Fish and Wildlife Service (USFWS) Final 2017 Biological Opinion (BO)

1.3.3 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the *CEQA Guidelines* Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

- a) *Have substantial adverse effects, either directly or through habitat modifications, on any species identified as a candidate, sensitive or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- b) *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*
- c) *Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*
- d) *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*
- e) *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*
- f) *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.*

2 Methodology

2.1 Biological Study Area

The Biological Study Area (BSA) for this project is defined as the limits of disturbance, including all grading and landscaping activities.

2.2 Literature Review

Rincon conducted a literature review to characterize the nature and extent of biological resources on and adjacent to the BSA. The literature review included an evaluation of current and historical aerial photographs of the site (Google Earth Pro 7.3.6.9345), regional and site-specific topographic maps, and climatic data.

Queries of the USFWS Information for Planning and Consultation system (USFWS 2023a), CDFW California Natural Diversity Database (CNDDDB; 2023a), and California Native Plant Society online Inventory of Rare and Endangered Plants of California (2023) were conducted to obtain comprehensive information regarding State and federally listed species, and other special-status species, considered to have potential to occur within the *Marina, California* United States Geological Survey 7.5-minute topographic quadrangle and the surrounding six¹ quadrangles (*Salinas, Prunedale, Spreckels, Monterey, Seaside, and Moss Landing*). The results of database queries and lists of special-status species were reviewed by Rincon's regional biological experts for accuracy and completeness. The final list of special-status biological resources (species and sensitive natural communities) was evaluated based on documented occurrences within the six-quadrangle search area and biologists' expert opinions on species known to occur in the region. The evaluation results and justification were compiled into a table (Appendix D).

The following resources were reviewed for additional information on existing conditions relating to biological resources within the BSA:

- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (2023)
- USFWS Critical Habitat Portal (USFWS 2023b)
- CDFW Biogeographic Information and Observation System (CDFW 2023b)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (2023c)
- CDFW Special Animals List (2023d)
- Draft Arborist Report (RRM Design Group 2023)

¹ Quadrangles are not mapped over the ocean; therefore, the seven-quadrangle search covers the project quadrangle and all bordering quadrangles.

2.3 Field Reconnaissance Survey

A reconnaissance survey was conducted within the BSA by Rincon Biologist Samantha Kehr on April 7, 2023. The field reconnaissance survey was conducted on foot to record all biological resources encountered in the BSA. The survey was conducted to document existing site conditions and to evaluate the potential for presence of regulated biological resources, including special-status plant and animal species, sensitive plant communities, and habitat for nesting birds protected by federal and State laws. Animal species were identified by direct observation, vocalization, or by sign (e.g., tracks, scat, or burrows). Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012). The vegetation classification used for this analysis is based on *A Manual of California Vegetation, Second Edition* (MCV2) (Sawyer et al. 2009), but it has been modified, as needed, to describe the existing vegetation communities and land cover types in the BSA most accurately. Site photographs taken during the survey are included in Appendix B. During the survey, an inventory of all plant and animal species observed was compiled (Appendix C).

2.4 Focused Botanical Surveys

Rincon conducted protocol-level botanical surveys to determine presence or absence of any federally and/or State listed or other special-status plant species in accordance with *Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants* (USFWS 2000), and *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (CDFW 2018). Rincon botanist Frances Glaser conducted the botanical field surveys on April 12 and June 20, 2023. The details regarding the weather conditions on-site during these surveys are provided in Table 2 below.

Table 2 Botanical Field Surveys

Date	Time	Temperature Range (°Fahrenheit)	Average Wind Speed (miles per hour)	Average Cloud Cover (%)
April 12, 2023	1012 - 1430	54-57	18-20	0
June 20, 2023	1045 - 1415	63-68	5-10	0

The botanical field surveys were floristic in nature; meaning that all vascular plant species encountered on-site were identified to the lowest possible taxonomic level required to determine the presence or absence and phenological stage (e.g., vegetative, flowering, fruiting) of the special-status plant species with potential to occur on-site. Reference site visits were used to confirm appropriate timing (see Section 2.4.1 below). Intuitively controlled transects were walked throughout the entire BSA so that 100 percent visual inspection was achieved. During field surveys, an inventory of all plant species observed was compiled, vegetation communities were classified, and the general site conditions were documented. Occurrences of special-status plants were mapped using a Trimble Global Positioning System (GPS) unit and aerial photos. Rincon graphics staff interpreted field maps and GPS data to develop the figures presented herein. Specific special-status plant occurrence data (i.e., number of individuals present at each mapped location) are maintained within the digital Geographic Information System (GIS) location files associated with each occurrence.

The Jepson Manual: Vascular Plants of California, Second Edition (Baldwin et al. 2012) and a 10x hand lens aided in confirmation of species identity in the field. Identification of collected specimens was confirmed in the laboratory with a dissecting microscope.

2.4.1 Botanical Reference Population Visits

Frances Glaser conducted visits to a known reference population of Monterey spineflower (*Chorizanthe pungens* var. *pungens*), Yadon's rein orchid (*Piperia yadonii*), and Monterey gilia (*Gilia tenuiflora* ssp. *arenaria*) during the bloom period to assess phenological state and to determine if conditions and timing were appropriate for the detection of these species and other co-occurring species with similar bloom patterns. On June 20, 2023, Frances Glaser observed Monterey spineflower, Yadon's rein orchid, and Michael's rein orchid. No Monterey gilia were observed at the known reference site.

2.5 Impact Evaluation

Impacts are defined as project-related activities that destroy, damage, alter, or otherwise affect biological resources. This may include injury or mortality to plant or wildlife species, effects on an animal's behavior (such as through harassment or frightening off an animal by construction noise), as well as the loss, modification, or disturbance of natural resources or habitats. Impacts are defined as either direct or indirect, and either permanent or temporary.

Direct impacts are generally those that occur during project implementation and at the same time and location as the cause of the impact. Direct impacts for this project may include injury, death, and/or harassment of special-status wildlife species, if present in the work areas or vicinity. Direct impacts may also include the destruction of habitat necessary for special-status species breeding, feeding, or sheltering. Direct impacts to plants can include crushing of plants, bulbs, or seeds where present in the impact areas.

Indirect impacts are those that are reasonably foreseeable and caused by a project but occur later in time and/or potentially at locations of some distance from the source of the impact. If a direct physical change in the environment in turn causes another change in the environment, then the other change is an indirect impact. Specific examples for this project may include soil compaction that, in the future, following completion of the project, prevents wildlife from digging burrows or allows weedy plant species to thrive.

Permanent impacts are those that result in the long-term or irreversible loss of biological resources are considered permanent. For example, construction of new buildings and paved areas, which would result in a large, developed, and fenced property where native vegetation may have existed before would constitute a permanent impact.

Temporary impacts to biological resources are those that are reversible over time, with or without implementation of avoidance measures. Examples include the generation of fugitive dust and noise during project implementation, trimming or crushing vegetation that will regrow following project completion, and removed vegetation that will be actively restored. These temporary impacts are anticipated to last during project implementation and shortly thereafter. However, the biological resources are anticipated to return to baseline after project completion.

3 Existing Conditions

3.1 Physical Characteristics

The BSA is generally flat and occurs on stabilized back dunes east of State Route 1 and Fort Ord Dunes State Park, along the southern coast of Monterey Bay.

No potentially jurisdictional features were observed in the BSA. The BSA is also outside the Coastal Zone as defined by the California Coastal Commission and is limited to the west side of State Route 1 in the city of Seaside.

One soil type was mapped within the BSA: Oceano loamy sand. This soil type is an excessively drained sandy soil found on dunes. It formed from eolian (wind-blown) deposits and typically occurs near the coast at low elevations (0 to 800 feet). Oceano sand typically has sand textures from the surface to at least 80 inches in depth and is typically moderately acidic. Oceano sand differs from Marina sand by having softer lamella, with fewer and thinner clay bridges among sand grains, making this soil looser and less cohesive (USDA NRCS 2022).

3.2 Vegetation and Other Land Cover

Plant species nomenclature and taxonomy followed *The Jepson Manual: Vascular Plants of California*, Second Edition (Baldwin et al. 2012). All plant species encountered were noted and identified to the lowest possible taxonomic level. The vegetation classification system used for this analysis is based on MCV2 (Sawyer et al. 2009) and *Preliminary Description of Terrestrial Natural Communities of California* (Holland 1986) but has been modified as needed to accurately describe the existing habitats observed on site (Figure 4).

3.2.1 Gowen Cypress

One small (10-feet tall by 25-feet wide) individual Gowen cypress (*Hesperocyparis goveniana*, federally threatened) was observed in the southeast corner of the BSA. This species naturally occurs in California coastal cypress woodland alliances with pygmy cypress (*Hesperocyparis pigmaea*), Monterey cypress (*Hesperocyparis macrocarpa*), Monterey pine (*Pinus radiata*), and coast live oak (*Quercus agrifolia*), with native shrubs, such as chamise (*Adenostoma fasciculatum*), hairy manzanita (*Arctostaphylos columbiana*), and evergreen huckleberry (*Vaccinium ovatum*) in the understory. The understory of all trees and stands of trees within the BSA are largely non-native, with many weedy species, such as ice plant (*Carpobrotus edulis*), English plantain (*Plantago lanceolata*), sourgrass (*Oxalis pes-caprae*), and French broom (*Genista monspessulana*). Given the dominance of non-native species, and isolation from natural vegetation communities, the Gowen cypress, along with the Monterey cypress, Monterey pine, and coast live oak within the BSA, do not constitute a natural woodland alliance as defined by MCV2. Historical aerial imagery of the BSA and surrounding areas show that no trees were present in the BSA before 1956. The spacing of the large Monterey cypress trees indicates they may have been planted; therefore, trees present within the BSA are likely ornamental plantings or offspring established or recruited from ornamental plantings (RRM Design Group 2023). Additionally, only two natural stands of this species remain statewide, one of which occurs on the Monterey Peninsula (USFWS 2004). Individual Gowen cypress outside these natural stands occur as a result of cultivation (USFWS 1998).

Figure 4 Vegetation Communities and Land Cover Types



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23-14076 B10
Fig 4 Vegetation Communities and Land Cover

3.2.2 Ice Plant Mat

Ice plant (*Carpobrotus edulis*) mats cover most of the BSA. Ice plant is a non-native invasive species, originally planted in the 1940s and 1950s for landscaping and dune stabilization (USACE 1992). These perennial ground-hugging succulents form large monospecific mats (Sawyer et al. 2009). Ice plant is an invasive species with a California Invasive Plant Council rating of “High” for its invasive tendencies. This hardy species spreads readily from landscaped areas into dune and scrub habitats, out-competing native species for space, nutrients, and moisture. Ice plant mats have overtaken the BSA, including the understory of tree stands. Within this community, some native species, such as deerweed (*Acmispon glaber*), shrubby coast live oak, and bare patches were observed. Botta’s pocket gopher (*Thomomys bottae*) and California ground squirrel (*Otospermophilus beecheyi*) burrows were also observed in ice plant mats.

3.2.3 Coast Live Oak

Small clusters of coast live oak have established and have likely been recruited from coast live oak woodlands to the east. Ice plant, sourgrass, and non-native annual grasses were observed in the understory. Coast live oak trees in the BSA are generally in poor health, due to a combination of poor soil, prolonged drought, and infestation of California oakworm (*Phryganidia californica*) (RRM Design Group 2023).

3.2.4 Monterey Pine

A small stand of Monterey pine occurs in the southwest corner of the BSA and are generally in moderate health (RRM Design Group 2023). These trees have also likely established from wind row plantings to the west along State Route 1. The understory of Monterey pine in the BSA is largely barren, with some sparse ice plant.

3.2.5 Monterey Cypress

Three individual Monterey cypress occur within the BSA and are generally in moderate health (RRM Design Group 2023). These trees may have been planted ornamentally and naturalized over time or may have been established from wind row plantings to the west along State Route 1. The understory of Monterey cypress in the BSA is largely barren, with some sparse ice plant.

3.2.6 Developed and Bare

Developed and bare areas of the BSA include the paved road and road shoulder along 1st Avenue and Gigling Road, on the eastern and southern borders of the site.

3.3 General Wildlife

Wildlife observed in the BSA is typical of urban and coastal areas of Monterey Bay, including red-tailed hawk (*Buteo jamaicensis*), Anna’s hummingbird (*Calypte anna*), European starling (*Sturnus vulgaris*), turkey vulture (*Cathartes aura*), and black-tailed deer (*Odocoileus hemionus*).

4 Sensitive Biological Resources

This section discusses special-status species and sensitive biological resources observed on the project site and evaluates the potential for the project site to support additional sensitive biological resources. Assessments for the potential occurrence of special-status species are based on known ranges, habitat preferences for the species, species occurrence records from the CNDDDB and other sources, species occurrence records from other sites near the survey area, previous reports for the project site, and the results of surveys of the project site. The potential for each special-status species to occur in the BSA was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on the site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential.** Some of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDDB, other reports) on the site recently (within the last 10 years).

4.1 Special-Status Species

4.1.1 Special-Status Plant Species

Fifty-three special-status plant species known to occur in the region were evaluated for their potential to occur in the BSA (Appendix D). Special-status plant species typically have specialized habitat requirements, including plant community types, soils, and/or elevational ranges. Due to the lack of natural coniferous forest, dune, and maritime chaparral vegetation communities, serpentine and rocky soils, and dominance of non-native ice plant mats, 45 species could be eliminated from the potential to occur. Four of the remaining species that have potential to occur in the BSA and would have been blooming or identifiable in April and June: Fort Ord spineflower (*Chorizanthe minutiflora*, CRPR 1B.2), robust spineflower (*Chorizanthe robusta* var. *robusta*, federally endangered), and northern curly-leaved monardella (*Monardella sinuata* ssp. *Nigrescens*, CRPR 1B.2) could also be eliminated based on negative observations during the botanical surveys. One naturally occurring special-status plant species, Monterey spineflower (federally threatened), was observed in the BSA and discussed in more detail below. Gowen cypress, Monterey cypress, and

Monterey pine also occur in the BSA; however, not in natural stands, and as such, these individuals are not considered special status.

Monterey Spineflower

Monterey spineflower is a prostrate annual species in the buckwheat family (Polygonaceae). Flowering occurs from late March to June, depending on weather patterns, and seed is dispersed in mid-summer. The species colonizes open, sandy sites and tends to invade roadsides and firebreaks. It is found in maritime chaparral, coast live oak woodland, coastal scrub, grassland, and coastal dune habitats. Monterey spineflower occurs along the coast of southern Santa Cruz and Monterey counties and inland to the coastal plain of the Salinas Valley. Approximately 300 Monterey spineflower were observed in the northwest corner of the BSA, with 1,000 plus individuals along the access road west of the BSA and partially within the southwest corner of the BSA (Figure 5).

4.1.2 Special-Status Wildlife Species

Thirty-eight special-status wildlife species were evaluated for their potential to occur within the BSA, and five species were found to have potential to occur (Appendix D). The remaining 33 species could be eliminated based on the species-specific habitat requirements and lack of suitable habitat such as perennial streams and rivers, native maritime chaparral and coastal dune habitats, large open grasslands, and connectivity with natural areas. Additionally, native birds have the potential to nest within the BSA. Species determined to have some potential to occur are discussed in further detail below.

Western Bumble Bee and Crotch Bumble Bee

Western bumble bee (*Bombus occidentalis*) and Crotch bumble bee (*Bombus crotchii*) are state candidates for listing (Endangered). The historic range of western bumble bee covered much of the western United States, from the Pacific coast to the Colorado Rocky Mountains. Crotch bumble bee occur in coastal California, including Mediterranean climates, east to the Sierra-Cascade crest and south into Mexico. These species are social insects and utilize small mammal burrows as annual colonies and have a wide variety of plant associations, including maritime chaparral and coastal dune species.

There are six CNDDDB occurrences of western bumble bee within 5 miles of the BSA. Flowering plants are present in the BSA, and an unidentified species of bumble bee (*Bombus* sp.) was observed within the BSA during the site visit, although no beehives were observed. Therefore, these species have a low potential to occur within the BSA and may incidentally move through the project site.

Figure 5 Monterey Spineflower



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23-14076-B10
Fig X Monterey Spineflower

Northern California Legless Lizard

The Northern California legless lizard (*Anniella pulchra*) is a CDFW species of special concern that is typically found in coastal dune, valley-foothill chaparral, and coastal scrub vegetation communities, and areas with sandy or loose organic soils or high amounts of leaf litter. The species prefers moist, warm, loose soil with plant cover, and moisture is an essential component of their habitat requirements. Occurs in sparsely vegetated areas of beach dunes, chaparral, pine-oak woodlands. This species has a moderate potential to occur within the BSA due to the presence of sandy soils and numerous CNDDDB occurrences within 5 miles.

Ferruginous Hawk

Ferruginous hawk (*Buteo regalis*) is a CDFW watch list species. A large raptor that winters in open, arid to semi-arid areas of California. They prefer open grasslands for foraging, primarily preying on small mammals, including ground squirrels.

There is one CNDDDB record for this species within 5 miles of the BSA, and there are several regional observations documented in eBird (Cornell Lab of Ornithology 2023). Marginal foraging habitat is present in ice plant mats; however, the site is small in comparison to more suitable grassland habitat inland on the former Fort Ord and would not support a large raptor. Red-tailed hawks are more commonly observed in this area. Therefore, this species has a low potential to occur within the BSA and may incidentally fly over or forage within the project site.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is a State fully protected species that occurs in open grasslands, meadows, open woodlands, marshes, and cultivated areas. Nests are built near the top of dense-topped trees along the edges of open grasslands and savannas. Prey species consist primarily of small mammals.

White-tailed kite is unlikely to nest or roost in trees on-site, given the general short height, and/or lack of density in the canopy. There is also a high level of human activity, given the proximity to residential housing on the south side of Gigling Road. However, multiple non-breeding occurrences of the species are documented in eBird (Cornell Lab of Ornithology 2023). Therefore, this species has a low potential to occur within the BSA and may incidentally fly over or forage within the project site.

Nesting Birds

Migratory birds protected under the MBTA and nesting birds and raptors protected under CFGC Section 3503 have the potential to breed and forage throughout the BSA. Nesting habitat includes trees, shrubs, grasses, and the ground surface.

4.2 Sensitive Natural Communities and Critical Habitat

Monterey cypress, Gowen cypress, and some coast live oak alliances are considered sensitive when occurring in natural stands or woodlands; however, no naturally occurring vegetation alliances are present, and there are few naturally occurring stands of these species in Seaside, particularly Monterey cypress. There are no naturally occurring stands of Gowen cypress in Seaside. Historical aerial imagery shows no trees were present in the BSA before 1956, and the spacing of the large Monterey cypress indicates they may have been planted (RRM Design Group 2023). Therefore,

individuals present within the BSA are likely ornamental plantings or offspring established or recruited from ornamental plantings and would not be considered sensitive.

4.3 Jurisdictional Waters and Wetlands

No potentially jurisdictional features occur within the BSA.

4.4 Wildlife Movement

Wildlife movement corridors, or habitat linkages, are generally defined as connections between habitat patches that allow for physical and genetic exchange between otherwise isolated animal populations or those populations that are at risk of becoming isolated. Such linkages may serve a local purpose, such as providing a linkage between foraging and denning areas, or they may be regional in nature. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Others may be important as dispersal corridors for young animals. A group of habitat linkages in an area can form a wildlife corridor network (Zeiner et al 1988).

The study area is not within any Essential Connectivity Areas or Natural Landscape Blocks (CDFW 2023b). Additionally, the BSA is surrounded by development and does not provide connectivity for local wildlife movement.

4.5 Resources Protected by Local Policies and Ordinances

The City of Seaside Municipal Code Chapter 8.54, Trees, provides standards for the removal, protection, and preservation of trees, defined as having a single trunk and a height of 10 feet or more, or has a circumference of 20 inches measured at 24 inches above the ground. The ordinance requires a tree removal permit and replacement plantings for any tree to be removed during project construction. In addition to requiring tree removal permits, the ordinance also requires measures to protect existing trees during project construction.

4.6 Habitat Conservation Plans

The BSA is not within any HCP or NCCP area, but is within former Fort Ord lands designated for development under the Fort Ord Habitat Management Plan (HMP) and 2017 United States Fish and Wildlife Service (USFWS) Biological Opinion (BO).

5 Impact Analysis and Mitigation Measures

This section discusses the potential impacts and effects to special-status species and sensitive biological resources that may occur from implementation of the project and provides recommended mitigation measures that would reduce those impacts where applicable. The analysis and recommendations are based on the *CEQA Guidelines* Appendix G Initial Study Checklist; therefore, Section 5 is organized according to the threshold criteria therein.

5.1 Special-Status Species

The proposed project would have a significant effect on biological resources if it would:

- a) *Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.*

5.1.1 Special-Status Plants

The BSA is relatively small and isolated from larger areas of natural dune and maritime chaparral habitats by surrounding development. The BSA is also covered by non-native ice plant mats and provides marginal habitat for special-status plant species. Despite these constraints, there is one federally threatened special-status plant species present within the BSA: Monterey spineflower. The project would result in potentially significant impacts to Monterey spineflower. The BSA is located within former Fort Ord parcels designated for development under the HMP and 2017 USFWS BO; however, the HMP and BO do not include coverage for “take” of listed species. The HMP and BO require identification of special-status species that may be salvaged for restoration in habitat reserve areas. Therefore, impacts to Monterey spineflower would require consultation with USFWS and preparation of a salvage and relocation plan. With approval of the salvage plan obtained from USFWS, and Avoidance and Minimization Measures BIO-1(a) and BIO-1(b), impacts to Monterey spineflower would be less than significant.

BIO-1(a) Monterey Spineflower Avoidance and Minimization

Monterey spineflower will be directly and/or indirectly impacted by project development. Wherever possible the project layout should be redesigned to avoid impacting those plants. Monterey spineflower that are not within the immediate disturbance footprint but are located within 50 feet of disturbance limits should be demarcated as an Environmentally Sensitive Area (ESA) and should have bright orange protective fencing installed a minimum of 30 feet beyond their extent prior to and during construction activities. Reduction of avoidance buffer distance must be approved by a qualified biologist. No construction activity should be allowed within these avoidance areas. To avoid encroachment within ESAs, the limits of work should be clearly shown on all project plans and demarcated on-site with high-visibility fencing. Work near such ESAs should be monitored by a qualified biologist to ensure no encroachment occurs. For impacts to Monterey spineflower plants that cannot be avoided, Mitigation Measure BIO-1(b) should be implemented.

BIO-1(b) Habitat Mitigation and Monitoring Plan

If all Monterey spineflower individuals cannot be avoided, habitat restoration or compensatory mitigation shall be required at a minimum ratio of 1:1 for occupied habitat area. Additionally, because Monterey spineflower is a federally-listed plant species, USFWS will likely require a restoration plan to be submitted for their review in support of federal and/or State incidental take authorization(s). Accordingly, a habitat mitigation and monitoring plan (HMMP) shall be prepared by a qualified biologist and submitted to the City for review and approval prior to issuance of grading permits. The HMMP shall include, at a minimum, the following components:

- Description of the project/impact site (i.e., location, responsible parties, areas to be impacted by habitat type)
- Goal(s) of the compensatory mitigation project [type(s) and area(s) of habitat to be established, restored, enhanced, and/or preserved; specific functions and values of habitat type(s) to be established, restored, enhanced, and/or preserved]
- Description of the proposed compensatory mitigation site (location and size, ownership status, existing functions and values)
- Implementation plan for the compensatory mitigation site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan)
- Maintenance activities during the monitoring period, including weed removal as appropriate (activities, responsible parties, schedule)
- Monitoring plan for the compensatory mitigation site, including no less than quarterly monitoring for the first year (performance standards, target functions and values, target acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports)
- Success criteria based on the goals and measurable objectives; said criteria to be, at a minimum, at least 80 percent survival of container plants and 30 percent relative cover by vegetation type
- An adaptive management program and remedial measures to address any shortcomings in meeting success criteria and/or to address catastrophic events, such as wildfires
- Notification of completion of compensatory mitigation and agency confirmation
- Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism)

5.1.2 Special-Status Wildlife

Five special-status wildlife species have potential to occur within the BSA based on known ranges, habitat preferences, species occurrence records near the BSA, and presence of suitable habitat. Northern California legless lizard has a moderate potential to occur in sandy soils within the BSA; and western bumble bee, Crotch bumble bee, ferruginous hawk, and white-tailed kite have a low potential to occur in the BSA while foraging. Native nesting birds protected by the MBTA and CFGC may also be present in the BSA.

Impacts to western bumble bee, Crotch bumble bee, ferruginous hawk, and white-tailed kite foraging habitat due to development would be small given the size of the BSA and low potential for these species to occur, and impacts would not be significant. However, if Northern California legless lizard is present in the soil during construction activities, individuals may be impacted through vibration and noise disturbance or direct mortality. Given the small size of the BSA, impacts on a population level are not expected; however, impacts to individuals during construction may be significant. In addition, construction could result in injury, harm, or mortality to nesting birds, if

present at the site during construction. Construction disturbance could also result in nest abandonment and failure. These impacts would be significant. Implementation of Avoidance and Minimization Measures BIO-1(c), BIO-1(d), and BIO-1(e) would reduce impacts to special-status wildlife species to less than significant.

BIO-1(c) Worker Environmental Awareness Program

Prior to initiation of construction activities (including staging and mobilization), the project proponent should arrange for all personnel associated with project construction for the applicable phase to attend Worker Environmental Awareness Program (WEAP) training, conducted by a City-approved biologist, to aid workers in recognizing special-status resources that may occur in the construction area. The specifics of this program should include identification of the sensitive species and habitats, a description of the regulatory status and general ecological characteristics of sensitive resources, and review of the limits of construction and mitigation measures required to reduce impacts to biological resources within the work area. A fact sheet conveying this information should also be prepared for distribution to all contractors, their employers, and other personnel involved with construction. All employees should sign a form provided by the trainer indicating they have attended the WEAP training and understand the information presented to them. The form should be submitted to the City to document compliance.

BIO-1(d) California Legless Lizard Pre-construction Survey and Relocation

A pre-construction clearance survey for Northern California legless lizard should be conducted by a City approved qualified biologist within 14 days prior to the start of construction (including staging and mobilization). The survey should cover the entire disturbance footprint plus a minimum 200-foot buffer, where permissible, and should identify all special-status animal species that may occur on the project site. If Northern California legless lizards are identified, individuals should be relocated by a qualified biologist to suitable cover with loose soils a minimum of 500 feet from the project site, as accessible.

BIO-1(e) Pre-construction Nesting Birds Surveys and Avoidance Buffers

Ground disturbance and vegetation removal activities should be restricted to the non-breeding season for birds (September 16 to January 31), when feasible. For ground disturbance and vegetation-removal activities occurring during the bird nesting season (February 1 to September 15), general pre-construction nesting bird surveys should be conducted by a qualified biologist not more than 14 days prior to construction activities involving ground clearing, vegetation removal/trimming, or building demolition. The surveys should include the disturbance area plus a 200-foot buffer around the site if feasible and a 500-foot buffer for raptors. If active nests are located, an appropriate avoidance buffer should be established within which no work activity would be allowed that would impact these nests. The avoidance buffer would be established by the qualified biologist on a case-by-case basis based on the species and site conditions. In no case should the buffer be smaller than 50 feet for non-raptor bird species, or 200 feet for raptor species. Larger buffers may be required depending on the status of the nest and the construction activities occurring near the nest. The buffer area(s) should be closed to all construction personnel and equipment until juveniles have fledged and until the nest is inactive. A City-approved biologist should confirm that breeding/nesting is completed and young have fledged the nest prior to removal of the buffer. If there are delays in on-site activities for more than 14 days during the breeding season, an additional survey should be required prior to the start of work.

5.2 Sensitive Natural Communities and Critical Habitat

The proposed project would have a significant effect on biological resources if it would:

- b) Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service.*

No CDFW-listed sensitive natural communities or riparian habitats are present within the BSA. Therefore, no impact to sensitive natural communities are expected.

5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.*

No jurisdictional features occur within the BSA. Therefore, no impact to wetlands or waters are expected.

5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

- d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.*

No corridors for wildlife movement occur within the BSA, and the site is completely enclosed in the developed area of the city and State Route 1. Therefore, the project would have no impact to wildlife movement.

5.5 Resources Protected by Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

- e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*

The project would remove 30 trees, including one Gowen cypress, one Monterey pine, three Monterey cypress, and 25 coast live oaks. The City's Municipal Code (Chapter 8.54) requires a tree removal permit and replacement plantings at a 1:1 ratio based on the condition of the trees and necessity of the project to construct improvements (RRM Design Group 2023). The project proponent would plant 30 replacement trees of a size and species satisfactory to the City's architectural review board. With City approval of the project landscaping plan, indicating the size, species, and location of replacement trees, there would be no conflict with local policies or ordinances.

5.6 Habitat Conservation Plans

The proposed project would have a significant effect on biological resources if it would:

- f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

The site is within former Fort Ord lands designated for development under the HMP and USFWS BO. There are no restrictions on development for this parcel under the HMP, and with consultation with USFWS for impacts to Monterey spineflower, impacts would be less than significant.

6 Limitations, Assumptions, and Use Reliance

This BRA has been performed pursuant to professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain wildlife taxa may have been conducted as part of this assessment but were not performed during a particular nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDDB, may vary with regard to accuracy and completeness. In particular, the CNDDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Additional publicly available sources such as eBird contain community science-based data that is reviewed by automated filters and volunteer bird experts. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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Appendix A

Regulatory Setting

Regulatory Setting

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, State, and local levels. A number of federal and State statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include the following:

- United States Army Corps of Engineers ([USACE] wetlands and other waters of the United States)
- United States Fish and Wildlife Service ([USFWS] federally listed species and migratory birds)
- National Marine Fisheries Service (marine wildlife and anadromous fishes)
- Central Coast Regional Water Quality Control Board ([RWQCB] waters of the State)
- California Department of Fish and Wildlife ([CDFW] riparian areas, streambeds, and lakes; state-listed species; nesting birds, marine resources)
- California Coastal Commission

United States Army Corps of Engineers

The USACE is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 Code of Federal Regulations (CFR) Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years, the USACE and United States Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining "waters of the United States" (e.g., the 2015 Clean Water Rule and 2020 Navigable Waters Protection Rule), but these efforts have been frustrated by legal challenges that have invalidated the updated regulations. Thus, the agencies' longstanding definition of "waters of the United States," dating from 1986, remains in effect, albeit with supplemental guidance interpreting applicable court decisions as described below.

Waters of the United States

In summary, USACE and USEPA regulations define "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;

3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
 - i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the ordinary high-water mark (OHWM) unless adjacent wetlands are present. The *OHWM* is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics, such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3[e]). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4[c]). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 Federal Register 41217).

Wetlands

The USACE defines wetlands as “those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 CFR 328.3). The USACE’s delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

Hydrophytic Vegetation

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned wetland indicator status according to the probability of their occurring in wetlands. More than 50

percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. Published in 2018 by the USACE, the National Wetland Plant List separates vascular plants into the following four basic categories, based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the USFWS's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5 percent vegetative cover to be considered as a vegetated wetland.

Hydric Soils

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

Wetland Hydrology

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

Applicable Case Law and Agency Guidance

The USACE's regulations defining "waters of the United States" have been subject to legal interpretation, and two influential Supreme Court decisions have narrowed the definition to exclude certain classes of waters that bear an insufficient connection to navigable waters. In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (2001), the United States Supreme Court stated that the USACE's CWA jurisdiction does not extend to ponds that "are not adjacent to open water." In reaching its decision, the Court concluded that the "Migratory Bird Rule," which served as the basis for the USACE's asserted jurisdiction, was not supported by the CWA. The Migratory Bird Rule extended CWA jurisdiction to intrastate waters "which are or would be used as habitat by birds protected by Migratory Bird Treaties or which are or would be used as habitat by other migratory birds which cross state lines..." The Court was concerned that application of the

Migratory Bird Rule resulted in "reading the term 'navigable waters' out of the statute. Highlighting the language of the CWA to determine the statute's jurisdictional reach, the Court stated, "the term 'navigable' has at least the import of showing us what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made." This decision stands for the proposition that non-navigable isolated, intrastate waters are not waters of the United States and thus are not jurisdictional under the CWA.

In 2006, the United States Supreme Court decided *Rapanos v. United States* and *Carabell v. United States* (collectively "Rapanos"), which were consolidated cases determining the extent of CWA jurisdiction over waters that carry only an infrequent surface flow. The court issued no majority opinion in Rapanos. Instead, the justices authored five separate opinions including the "plurality" opinion, authored by Justice Scalia (joined by three other justices) and a concurring opinion by Justice Kennedy. To guide implementation of the decision, the USACE and USEPA issued a joint guidance memorandum (Rapanos Guidance Memorandum) in 2008 stating that "regulatory jurisdiction under the CWA exists over a water body if either the plurality's or Justice Kennedy's standard is satisfied."

According to the plurality opinion in Rapanos, "the waters of the United States include only relatively permanent, standing or flowing bodies of water" and do not include "ordinarily dry channels through which water occasionally or intermittently flows." In addition, while all wetlands that meet the USACE definition are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.

Under Justice Kennedy's opinion, "the USACE's jurisdiction over wetlands depends on the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. Wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term 'navigable waters.'" Justice Kennedy identified "pollutant trapping, flood control, and runoff storage" as some of the critical functions wetlands can perform relative to other waters. He concluded that, given wetlands' ecological role, "mere adjacency" to a non-navigable tributary was insufficient to establish CWA jurisdiction, and that "a more specific inquiry, based on the significant nexus standard, is therefore necessary."

Interpreting these decisions, and according to the Rapanos Guidance Memorandum, the USACE and USEPA will assert jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months); and,
- Wetlands that directly abut such tributaries.

The USACE and USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Where a significant nexus analysis is required, the USACE and USEPA will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and,
- Significant nexus includes consideration of hydrologic and ecologic factors.

The USACE and USEPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and,
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine RWQCBs have jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code Section 13050[e]). These agencies also have responsibilities for administering portions of the CWA.

Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide State certification that the proposed activity will not violate State and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a “reasonable period of time” for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed 1 year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code Section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDR). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB’s *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act’s requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA

Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

Non-wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the State except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

- The area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;
- The duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and
- The area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the United States and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

United States Fish and Wildlife Service

The USFWS implements several laws protecting the Nation's fish and wildlife resources, including the Federal Endangered Species Act ([FESA] 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act ([MBTA] 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act ([BGEPA] 16 USC Section 668).

Endangered Species Act

The USFWS and National Marine Fisheries Service share responsibility for implementing the FESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered wildlife species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan)

of the FESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. *Take*, under federal definition, means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the United States entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

1. It occurs in the United States or United States territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments.
2. Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or United States territories as the result of natural biological or ecological processes.
3. New evidence exists for its natural occurrence in the United States or United States territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or United States territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The Migratory Bird Treaty Reform Act requires the USFWS to publish a list of all non-native, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or United States territories is solely the result of intentional or unintentional human-assisted introductions.

Bald and Golden Eagle Protection Act

The BGEPA prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The BGEPA provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter,

transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The BGEPA defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

Disturb means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

California Department of Fish and Wildlife

The CDFW derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

California Endangered Species Act

The CESA (Fish and Game Code Section 2050 et. seq.) prohibits take of State listed threatened or endangered species. *Take*, under CESA, is defined as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code Section 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike FESA, CESA's protections extend to candidate species during the period (typically 1 year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act ([NPPA] Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 California Code of Regulations [CCR] 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take

Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception lies within situations where a Natural Community Conservation Plan is in place that authorizes take of the Fully Protected species.

Avian Protection Laws

California Fish and Game Code Section 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a State-level offense to take any bird in violation of the MBTA.

Protection of Lakes and Streambeds

California Fish and Game Code Section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the CDFW of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, the California Department of Fish and Game determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a Final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of the California Fish and Game Code** establishes the following general concepts:
 - References "river," "stream," and "lake"
 - References "natural flow"
 - References "bed," "bank," and "channel"
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987)), which interpreted Section 1602's use of "stream" to be as defined in common law. The Court indicated that a "stream" is commonly understood to:
 - Have a source and a terminus
 - Have banks and a channel
 - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
 - Represent the depression between the banks worn by the regular and usual flow of the water

- Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
 - Include the land that is covered by the water in its ordinary low stage
 - Include lands below the OHWM
- **CDFW regulations** defining “stream” for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
 - Flows at least periodically or intermittently
 - Flows through a bed or channel having banks
 - Supports fish or aquatic life
 - Can be dry for a period of time
 - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation
- **Guidance documents**, including *A Field Guide to Lake and Streambed Alteration Agreements* (California Department of Fish and Game 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
 - A stream may flow perennially or episodically
 - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
 - Width of a stream course can reasonably be identified by physical or biological indicators
 - A stream may have one or more channels (single thread vs. compound form)
 - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
 - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
 - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic wildlife including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
 - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

Local Jurisdiction

2004 Seaside General Plan

The Conservation/Open Space Element of the Seaside 2004 General Plan includes policies addressing protection of sensitive biological resources. The Goal of COS-4 is to “preserve and protect the sensitive habitats and species within the community.” Policy COS-4.1 is to “Preserve ecological and biological resources by maintaining these resources as open space.” Implementation Plan COS-4.1.1 is to “Require Proper Analysis and Mitigation of Biological Resources. Use proper land use planning and environmental review to minimize the impact of urban development on sensitive ecological and biological resources. Where feasible, require open space easements and/or buffers to avoid impacts to sensitive biological resources. Where on-site preservation is not feasible, require habitat replacement at locations and ratios acceptable to the State and Federal agencies with jurisdiction over the project.”

Policy COS-4.2 is to “Protect and enhance the creeks, lakes, and adjacent wetlands for their value in providing visual amenity, habitat for wildlife, and recreational opportunities.”

Policy COS-4.3 is to “Encourage the preservation and enhancement of oak woodland elements in the natural and built environments.” Implementation Plan COS-4.3.1 requires “project developers to retain coast live oak trees within the planning area, including oaks within new development areas. All coast live oak trees should be surveyed prior to construction to determine if any raptor nests are present and active. If active nests are observed, the construction should be postponed until the end of the fledgling.”

Draft Seaside 2040

The goals, policies, and implementation actions of Draft Seaside 2040 support growth and redevelopment, which includes areas within the jurisdiction of the City’s Local Coastal Plan, as well as on undeveloped former Fort Ord lands. New development under Draft Seaside 2040 on former Fort Ord lands would incorporate open space corridors with trails that support natural vegetation communities, and sensitive habitats.

Draft Seaside 2040 includes “Goal POC-8: Sensitive species and habitat protected on former Fort Ord lands.” The Fort Ord Habitat Management Plan (HMP) provides a framework “to conserve and manage special-status species, animal communities, and habitat areas on former Fort Ord lands. This goal aims to implement those plans locally, identifying and managing habitat areas and species.” Draft Seaside 2040 includes “Goal POC-9: New development supports the preservation or enhancement of the City’s natural resources.” One of the implementing Policies for POC-9 states “Clustered development. Cluster new development on former Fort Ord lands to minimize impacts to oak woodlands and linkages, preserve habitat management areas, and protect steep slopes, wetlands, and waterways.” Other implementing policies for POC-9 state “Integrating oak woodland. Work with developers to promote an understanding of existing oak trees and previously-identified oak woodland linkages as they design new developments.”

Seaside Municipal Code

The City of Seaside Municipal Code Title 8 Health and Safety, Chapter 8.54, Trees, provides standards for the removal, protection and preservation of trees. The ordinance requires a tree removal permit and replacement plantings for any tree to be removed during project construction. In addition to requiring tree removal permits, the ordinance also requires measures to protect existing trees during project construction.

Fort Ord Habitat Management Plan

The Fort Ord HMP was published by the USACE in 1997 in compliance with the USFWS Final 2017 Biological Opinion for disposal and reuse of former Fort Ord lands. The HMP establishes guidelines for the conservation and management of plant and wildlife species and their habitat that occur on former Fort Ord lands. The HMP promotes preservation, enhancement, and restoration of habitat and populations of HMP covered species while allowing development on selected properties that promotes economic recovery after closure of the fort.

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Appendix B

Site Photographs



Photograph 1. The southeast corner of the Biological Study Area (BSA), facing east. April 7, 2023.



Photograph 2. The small Gowen cypress at the southeast corner of the BSA (photo center), facing northwest. April 7, 2023.



Photograph 3. The south side of the BSA, facing southwest. April 7, 2023.



Photograph 4. The east side of the BSA west of 1st Avenue, facing north. April 7, 2023.



Photograph 5. Coast live oaks and a Monterey cypress on the east side of the BSA, facing north. April 7, 2023.



Photograph 6. Overview of the BSA from the northeast corner, facing southwest. April 7, 2023.



Photograph 7. The north side of the BSA from the northeast corner, facing west. April 7, 2023.



Photograph 8. The north side of the BSA from the northwest corner, facing east. April 7, 2023.



Photograph 9. Overview of the BSA from the northwest corner, facing southeast. April 7, 2023.



Photograph 10. The south side of the BSA from the west side, facing southeast. April 7, 2023.



Photograph 11. Monterey Cypress and Monterey pine at the southwest corner of the BSA, facing south. April 7, 2023.



Photograph 12. Monterey spineflower patch within BSA, facing northeast. June 20, 2023.

Appendix C

Floral and Faunal Compendium

Plant Species Observed within the Biological Study Area on April 7, April 12, and June 20, 2023

Scientific Name ¹	Common Name	Status	Native or Introduced ²
Trees			
<i>Acacia longifolia</i>	Sydney golden wattle	–	Non-native
<i>Hesperocyparis goveniana</i>	Gowen cypress	FT; 1B.2	Native
<i>Hesperocyparis macrocarpa</i>	Monterey cypress	1B.2	Native
<i>Pinus radiata</i>	Monterey pine	–	Native
<i>Quercus agrifolia</i>	coast live oak	–	Native
Shrubs			
<i>Baccharis pilularis</i>	coyote brush	None	Native
<i>Ericameria ericoides</i>	mock heather	–	Native
<i>Genista monspessulana</i>	French broom	None	Non-native; Cal-IPC high
<i>Heteromeles arbutifolia</i>	toyon	None	Native
<i>Lupinus chamissonis</i>	silver dune lupine	–	Native
<i>Toxicodendron diversilobum</i>	poison oak	None	Native
Herbs			
<i>Achillea millefolium</i>	common yarrow	–	Native
<i>Acmispon glaber</i>	deerweed	–	Native
<i>Brassica nigra</i>	black mustard	–	Non-native; Cal-IPC moderate
<i>Camissoniopsis micrantha</i>	Spencer primrose	–	Native
<i>Cardionema ramosissimum</i>	sandcarpet	–	Native
<i>Carduus pycnocephalus</i>	Italian thistle	–	Non-native; Cal-IPC moderate
<i>Carpobrotus edulis</i>	ice plant	–	Non-native; Cal-IPC high
<i>Centaurea melitensis</i>	tochalote	–	Non-native; Cal-IPC moderate
<i>Chorizanthe pungens</i> var. <i>pungens</i>	Monterey spineflower	–	Native; FT, CRPR 1B.2
<i>Claytonia perfoliata</i>	miner's lettuce	–	Native
<i>Corethrogyne filaginifolia</i>	common sandaster	–	Native
<i>Crassula connata</i>	sandy pygmy weed	–	Native
<i>Deinandra corymbosa</i>	coastal tarweed	–	Native
<i>Dipterostemon capitatus</i>	blue dicks	–	Native
<i>Erigeron canadensis</i>	Canada horseweed	–	Native
<i>Erodium cicutarium</i>	red stemmed filaree	–	Non-native; Cal-IPC limited
<i>Eschscholzia californica</i>	California poppy	–	Native
<i>Fragaria chiloensis</i>	beach strawberry	–	Native
<i>Galium aparine</i>	common bedstraw	–	Native
<i>Geranium dissectum</i>	cutleaf geranium	–	Non-native; Cal-IPC limited
<i>Helminthotheca echioides</i>	bristly ox-tongue	–	Non-native; Cal-IPC limited
<i>Heterotheca grandiflora</i>	telegraphweed	–	Native
<i>Hypochaeris glabra</i>	smooth cat's ear	–	Non-native; Cal-IPC limited
<i>Logfia gallica</i>	narrowleaf cottonrose	–	Non-native

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Scientific Name ¹	Common Name	Status	Native or Introduced ²
<i>Lupinus nanus</i>	sky lupine	–	Native
<i>Lysimachia arvensis</i>	scarlet pimpernel	–	Non-native
<i>Malva parviflora</i>	cheeseweed mallow	–	Non-native
<i>Marah fabacea</i>	California man-root	–	Native
<i>Medicago polymorpha</i>	bur clover	–	Non-native; Cal-IPC limited
<i>Melilotus indicus</i>	annual yellow sweetclover	–	Non-native
<i>Nuttallanthus texanus</i>	blue toadflax	–	Native
<i>Oxalis pes-caprae</i>	sourgrass	–	Non-native; Cal-IPC moderate
<i>Pentagramma triangularis</i>	gold back fern	–	Native
<i>Piperia michaelii</i>	Michael’s rein orchid	–	Native
<i>Plantago coronopus</i>	cut leaf plantain	–	Non-native
<i>Plantago erecta</i>	California plantain	–	Native
<i>Plantago lanceolata</i>	English plantain	–	Non-native; Cal-IPC limited
<i>Polygonum aviculare</i>	prostrate knotweed	–	Non-native
<i>Pseudognaphalium ramosissimum</i>	pink cudweed	–	Native
<i>Pseudognaphalium stramineum</i>	cottonbatting plant	–	Native
<i>Rumex acetosella</i>	common sheep sorrel	–	Non-native; Cal-IPC moderate
<i>Sonchus asper</i>	spiny sowthistle	–	Non-native
<i>Trifolium angustifolium</i>	narrow leafed clover	–	Non-native
<i>Urtica urens</i>	annual stinging nettle	–	Non-native
<i>Vicia villosa</i>	hairy vetch	–	Non-native
Grasses			
<i>Aira caryophylla</i>	silver hairgrass	–	Non-native
<i>Avena barbata</i>	slender oat	–	Non-native; Cal-IPC moderate
<i>Bromus diandrus</i>	ripgut brome	–	Non-native; Cal-IPC moderate
<i>Bromus hordeaceus</i>	soft brome	–	Non-native; Cal-IPC limited
<i>Bromus madritensis</i>	foxtail brome	–	Non-native
<i>Festuca myuros</i>	rattail sixweeks grass	–	Non-native; Cal-IPC moderate
<i>Festuca perennis</i>	Italian rye grass	–	Non-native; Cal-IPC moderate
<i>Hordeum murinum</i>	foxtail barley	–	Non-native; Cal-IPC moderate

Cal-IPC = California Invasive Plant Council

¹ Calflora 2023

² California Invasive Plant Council 2006. California Invasive Plant Inventory. Cal-IPC Publication 2006-02. California Invasive Plant Council: Berkeley, CA. www.cal-ipc.org. Accessed 2023

Wildlife Species Observed within the Biological Study Area on April 7, 2023

Scientific Name	Common Name	Status	Native or Introduced
Insects			
<i>Bombus</i> sp.	bumble bee	None	Native
Birds			
<i>Bombycilla cedrorum</i>	cedar waxwing	None	Native
<i>Buteo jamaicensis</i>	red-tailed hawk	None	Native
<i>Calypte anna</i>	Anna's hummingbird	None	Native
<i>Cathartes aura</i>	turkey vulture	None	Native
<i>Corvus brachyrhynchos</i>	American crow	None	Native
<i>Haemorhous mexicanus</i>	house finch	None	Native
<i>Streptopelia decaocto</i>	Eurasian collared dove	None	Introduced
<i>Sturnus vulgaris</i>	European starling	None	Introduced
<i>Junco hyemalis</i>	dark-eyed junco	None	Native
Mammals			
<i>Odocoileus hemionus</i>	black tail deer	None	Native
<i>Otospermophilus beecheyi</i>	California ground squirrel	None	Native
<i>Thomomys bottae</i>	Botta's pocket gopher	None	Native

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Appendix D

Special-Status Species Evaluation Tables

Special-Status Plant and Lichen Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Agrostis lacuna-vernalis</i> vernal pool bent grass	None/None G1/S1 1B.1	Annual herb. Vernal pools. In mima mound areas or on the margins of vernal pools. Elevations: 375-475 ft. (115-145 m.) Blooms Apr-May.	Not Expected	Vernal pools are not present
<i>Allium hickmanii</i> Hickman's onion	None/None G2/S2 1B.2	Perennial bulbiferous herb. Chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Sandy loam, damp ground and vernal swales; mostly in grassland though can be associated with chaparral or woodland. Elevations: 15-655 ft. (5-200 m.) Blooms Mar-May.	Not Expected	Natural vegetation communities with mesic soils are not present, this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i> Hooker's manzanita	None/None G3T2/S2 1B.2	Perennial evergreen shrub. Chaparral, cismontane woodland, closed-cone coniferous forest, coastal scrub. Sandy. Elevations: 195-1760 ft. (60-536 m.) Blooms Jan-Jun.	Not Expected	Natural vegetation communities are not present; manzanita were not observed on site, and the BSA is isolated by development.
<i>Arctostaphylos montereyensis</i> Toro manzanita	None/None G2?/S2? 1B.2	Perennial evergreen shrub. Chaparral, cismontane woodland, coastal scrub. Sandy. Elevations: 100-2395 ft. (30-730 m.) Blooms Feb-Mar.	Not Expected	Natural vegetation communities are not present; manzanita were not observed on site, and the BSA is isolated by development.
<i>Arctostaphylos pajaroensis</i> Pajaro manzanita	None/None G1/S1 1B.1	Perennial evergreen shrub. Chaparral. Sandy soils. Elevations: 100-2495 ft. (30-760 m.) Blooms Dec-Mar.	Not Expected	There is one known occurrence overlapping the BSA; however, this occurrence is nonspecific; natural vegetation communities are not present, and manzanita were not observed on-site.
<i>Arctostaphylos pumila</i> sandmat manzanita	None/None G1/S1 1B.2	Perennial evergreen shrub. Chaparral, cismontane woodland, closed-cone coniferous forest, coastal dunes, coastal scrub. Openings, sandy. Elevations: 10-675 ft. (3-205 m.) Blooms Feb-May.	Not Expected	Natural vegetation communities are not present; manzanita were not observed on site, and the BSA is isolated by development.
<i>Astragalus tener</i> var. <i>tener</i> alkali milk-vetch	None/None G2T1/S1 1B.2	Annual herb. Playas, valley and foothill grassland, vernal pools. Alkaline. Elevations: 5-195 ft. (1-60 m.) Blooms Mar-Jun.	Not Expected	Natural vegetation communities with vernal pools and alkaline soils are not present, and the BSA is isolated by development.

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Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Astragalus tener</i> var. <i>titi</i> coastal dunes milk-vetch	FE/SE G2T1/S1 1B.1	Annual herb. Coastal bluff scrub, coastal dunes, coastal prairie. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. Elevations: 5-165 ft. (1-50 m.) Blooms Mar-May.	Not Expected	Natural coastal dunes vegetation communities are not present, and the BSA is isolated by development.
<i>Castilleja ambigua</i> var. <i>insalutata</i> pink Johnny-nip	None/None G4T2/S2 1B.1	Annual herb (hemiparasitic). Coastal prairie, coastal scrub. Wet or moist coastal strand or scrub habitats. Elevations: 0-330 ft. (0-100 m.) Blooms May-Aug.	Not Expected	Natural coastal dunes vegetation communities are not present, and the BSA is isolated by development.
<i>Centromadia parryi</i> ssp. <i>congdonii</i> Congdon's tarplant	None/None G3T2/S2 1B.1	Annual herb. Valley and foothill grassland. Alkaline soils, sometimes described as heavy white clay. Elevations: 0-755 ft. (0-230 m.) Blooms May-Oct(Nov).	Not Expected	Natural vegetation communities with alkaline clay soils are not present, and the BSA is isolated by development.
<i>Chorizanthe minutiflora</i> Fort Ord spineflower	None/None G1/S1 1B.2	Annual herb. Chaparral, coastal scrub. Openings, sandy. Elevations: 180-490 ft. (55-150 m.) Blooms Apr-Jul.	Low Potential	Sandy openings are present; however, natural coastal dunes vegetation communities are not present, and the BSA is isolated by development.
<i>Chorizanthe pungens</i> var. <i>pungens</i> Monterey spineflower	FT/None G2T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland. Sandy. Elevations: 10-1475 ft. (3-450 m.) Blooms Apr-Jun (Jul-Aug).	Present	This species was observed in the northwest corner of the BSA during the focused rare plant survey on June 20, 2023.
<i>Chorizanthe robusta</i> var. <i>robusta</i> robust spineflower	FE/None G2T1/S1 1B.1	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Gravelly (sometimes), sandy (sometimes). Elevations: 10-985 ft. (3-300 m.) Blooms Apr-Sep.	Low Potential	Sandy openings are present; however, natural coastal dunes vegetation communities are not present, and the BSA is isolated by development.
<i>Clarkia jolonensis</i> Jolon clarkia	None/None G2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevations: 65-2165 ft. (20-660 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities are not present, and the BSA is isolated by development.
<i>Collinsia multicolor</i> San Francisco collinsia	None/None G2/S2 1B.2	Annual herb. Closed-cone coniferous forest, coastal scrub. Serpentine (sometimes). Elevations: 100-900 ft. (30-275 m.) Blooms (Feb) Mar-May.	Not Expected	Natural vegetation communities with serpentine soils are not present; this species was not observed during its blooming period, and the BSA is isolated by development.

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Cordylanthus rigidus</i> ssp. <i>littoralis</i> seaside bird's-beak	None/SE G5T2/S2 1B.1	Annual herb (hemiparasitic). Chaparral, cismontane woodland, closed-cone coniferous forest, coastal dunes, coastal scrub. Disturbed areas (often), sandy. Elevations: 0-1690 ft. (0-515 m.) Blooms Apr-Oct.	Not Expected	Natural vegetation communities are not present, and the BSA is isolated by development.
<i>Delphinium californicum</i> ssp. <i>interius</i> Hospital Canyon larkspur	None/None G3T3/S3 1B.2	Perennial herb. Chaparral, cismontane woodland, coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. Elevations: 640-3595 ft. (195-1095 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities and mesic soils are not present, and the BSA is isolated by development.
<i>Delphinium hutchinsoniae</i> Hutchinson's larkspur	None/None G2/S2 1B.2	Perennial herb. Broadleafed upland forest, chaparral, coastal prairie, coastal scrub. On semi-shaded, slightly moist slopes, usually west-facing. Elevations: 0-1400 ft. (0-427 m.) Blooms Mar-Jun.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Delphinium umbraculorum</i> umbrella larkspur	None/None G3/S3 1B.3	Perennial herb. Chaparral, cismontane woodland. Mesic sites. Elevations: 1310-5250 ft. (400-1600 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities and mesic soils are not present, and the BSA is isolated by development.
<i>Eriastrum tracyi</i> Tracy's eriastrum	None/SR G3Q/S3 3.2	Annual herb. Chaparral, cismontane woodland, valley and foothill grassland. Gravelly shale or clay; often in open areas. Elevations: 1035-5840 ft. (315-1780 m.) Blooms May-Jul.	Not Expected	Natural vegetation communities with gravel, shale, or clay soils are not present, and the BSA is isolated by development.
<i>Ericameria fasciculata</i> Eastwood's goldenbush	None/None G2/S2 1B.1	Perennial evergreen shrub. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. In sandy openings. Elevations: 100-900 ft. (30-275 m.) Blooms Jul-Oct.	Not Expected	Natural vegetation communities are not present; no goldenbush were observed, and the BSA is isolated by development.
<i>Eriogonum nortonii</i> Pinnacles buckwheat	None/None G2/S2 1B.3	Annual herb. Chaparral, valley and foothill grassland. Sandy soils; often on recent burns; western Santa Lucias. Elevations: 985-3200 ft. (300-975 m.) Blooms (Apr) Aug (Sep) May-Jun.	Not Expected	Natural vegetation communities are not present; no buckwheat were observed, and the BSA is isolated by development.
<i>Erysimum ammophilum</i> sand-loving wallflower	None/None G2/S2 1B.2	Perennial herb. Chaparral, coastal dunes, coastal scrub. Sandy openings. Elevations: 0-195 ft. (0-60 m.) Blooms Feb-Jun (Jul-Aug).	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.

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<i>Erysimum menziesii</i> Menzies' wallflower	FE/SE G1/S1 1B.1	Perennial herb. Coastal dunes. Localized on dunes and coastal strand. Elevations: 0-115 ft. (0-35 m.) Blooms Mar-Sep.	Not Expected	Natural dune vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Fritillaria liliacea</i> fragrant fritillary	None/None G2/S2 1B.2	Perennial bulbiferous herb. Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland. Often on serpentine; various soils reported though usually on clay, in grassland. Elevations: 10-1345 ft. (3-410 m.) Blooms Feb-Apr.	Not Expected	Natural vegetation communities with serpentine or clay soils are not present, and the BSA is isolated by development.
<i>Gilia tenuiflora</i> ssp. <i>arenaria</i> Monterey gilia	FE/ST G3G4T2/S2 1B.2	Annual herb. Chaparral, cismontane woodland, coastal dunes, coastal scrub. Sandy openings in bare, wind-sheltered areas. Often near dune summit or in the hind dunes; two records from Pleistocene inland dunes. Elevations: 0-150 ft. (0-45 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Hesperocyparis goveniana</i> Gowen cypress	FT/None G1/S1 1B.2	Perennial evergreen tree. Chaparral, closed-cone coniferous forest. Coastal terraces; usually in sandy soils; sometimes with Monterey pine, bishop pine. Elevations: 100-985 ft. (30-300 m.)	Present	One small individual was identified on-site by the arborist and was confirmed during Rincon's botanical surveys. This individual occurs outside the two known populations, however, and is likely the result of cultivation for ornamental plantings.
<i>Hesperocyparis macrocarpa</i> Monterey cypress	None/None G1/S1 1B.2	Perennial evergreen tree. Closed-cone coniferous forest. Granitic soils. Elevations: 35-100 ft. (10-30 m.)	Present	This species was identified in the BSA; however, these individuals are likely the result of naturalized ornamental plantings (RRM Design Group 2023).
<i>Holocarpha macradenia</i> Santa Cruz tarplant	FT/SE G1/S1 1B.1	Annual herb. Coastal prairie, coastal scrub, valley and foothill grassland. Light, sandy soil or sandy clay; often with non-natives. Elevations: 35-720 ft. (10-220 m.) Blooms Jun-Oct.	Not Expected	Natural vegetation communities with clay soils are not present, and the BSA is isolated by development.

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Horkelia cuneata</i> var. <i>sericea</i> Kellogg's horkelia	None/None G4T1?/S1? 1B.1	Perennial herb. Chaparral, closed-cone coniferous forest, coastal dunes, coastal scrub. Old dunes, coastal sandhills; openings. Sandy or gravelly soils. Elevations: 35-655 ft. (10-200 m.) Blooms Apr-Sep.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Horkelia marinensis</i> Point Reyes horkelia	None/None G2/S2 1B.2	Perennial herb. Coastal dunes, coastal prairie, coastal scrub. Sandy flats and dunes near coast; in grassland or scrub plant communities. Elevations: 15-2475 ft. (5-755 m.) Blooms May-Sep.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Lasthenia conjugens</i> Contra Costa goldfields	FE/None G1/S1 1B.1	Annual herb. Cismontane woodland, playas, valley and foothill grassland, vernal pools. Vernal pools, swales, low depressions, in open grassy areas. Elevations: 0-1540 ft. (0-470 m.) Blooms Mar-Jun.	Not Expected	Natural vegetation communities with vernal pools are not present, and the BSA is isolated by development.
<i>Layia carnosa</i> beach layia	FT/SE G2/S2 1B.1	Annual herb. Coastal dunes, coastal scrub. On sparsely vegetated, semi-stabilized dunes, usually behind foredunes. Elevations: 0-195 ft. (0-60 m.) Blooms Mar-Jul.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Legenere limosa</i> legenere	None/None G2/S2 1B.1	Annual herb. Vernal pools. In beds of vernal pools. 1-. Elevations: 5-2885 ft. (1-880 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities with vernal pools are not present, and the BSA is isolated by development.
<i>Lupinus tidestromii</i> Tidestrom's lupine	FE/SE G1/S1 1B.1	Perennial rhizomatous herb. Coastal dunes. Partially stabilized dunes, immediately near the ocean. Elevations: 0-330 ft. (0-100 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Malacothamnus palmeri</i> var. <i>involucratus</i> Carmel Valley bush-mallow	None/None G3T2Q/S2 1B.2	Perennial deciduous shrub. Chaparral, cismontane woodland, coastal scrub. Talus hilltops and slopes, sometimes on serpentine. Fire dependent. Elevations: 100-3610 ft. (30-1100 m.) Blooms Apr-Oct.	Not Expected	Natural vegetation communities with serpentine soils are not present; this species was not observed during its blooming period, and the BSA is isolated by development.

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Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Malacothrix saxatilis</i> var. <i>arachnoidea</i> Carmel Valley malacothrix	None/None G5T2/S2 1B.2	Perennial rhizomatous herb. Chaparral, coastal scrub. Rock outcrops or steep rocky roadcuts. Elevations: 80-3400 ft. (25-1036 m.) Blooms (Mar) Jun-Dec.	Not Expected	Natural vegetation communities with rocky soils are not present; this species was not observed, and the BSA is isolated by development.
<i>Meconella oregana</i> Oregon meconella	None/None G2G3/S2 1B.1	Annual herb. Coastal prairie, coastal scrub. Open, moist places. Elevations: 820-2035 ft. (250-620 m.) Blooms Mar-Apr.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Microseris paludosa</i> marsh microseris	None/None G2/S2 1B.2	Perennial herb. Cismontane woodland, closed-cone coniferous forest, coastal scrub, valley and foothill grassland. Elevations: 15-1165 ft. (5-355 m.) Blooms Apr-Jun (Jul).	Not Expected	Natural vegetation communities are not present; this species was not observed, and the BSA is isolated by development.
<i>Monardella sinuata</i> ssp. <i>nigrescens</i> northern curly-leaved monardella	None/None G3T2/S2 1B.2	Annual herb. Chaparral, coastal dunes, coastal scrub, lower montane coniferous forest. Sandy soils. Elevations: 0-985 ft. (0-300 m.) Blooms (Apr) May-Jul (Aug-Sep).	Low Potential	There is a known occurrence for the general area along Gigling Road, and sandy soils are present; however, natural vegetation communities are not present and the BSA is isolated by development.
<i>Monolopia gracilens</i> woodland woollythreads	None/None G3/S3 1B.2	Annual herb. Broadleafed upland forest, chaparral, cismontane woodland, north coast coniferous forest, valley and foothill grassland. Grassy sites, in openings; sandy to rocky soils. Often seen on serpentine after burns, but may have only weak affinity to serpentine. Elevations: 330-3935 ft. (100-1200 m.) Blooms (Feb) Mar-Jul.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Pinus radiata</i> Monterey pine	None/None G1/S1 1B.1	Perennial evergreen tree. Cismontane woodland, closed-cone coniferous forest. Dry bluffs and slopes. Elevations: 80-605 ft. (25-185 m.)	Present	This species was identified in the BSA; however, these individuals are likely the result of naturalized ornamental plantings (RRM Design Group 2023).
<i>Piperia yadonii</i> Yadon's rein orchid	FE/None G1/S1 1B.1	Perennial herb. Chaparral, closed-cone coniferous forest, coastal bluff scrub. On sandstone and sandy soil, but poorly drained and often dry. Elevations: 35-1675 ft. (10-510 m.) Blooms (Feb) May-Aug.	Low Potential	Natural vegetation communities are not present; however, there are known occurrences of this species in the vicinity of the BSA.

Scientific Name Common Name	Status Fed/State ESA CRPR	Habitat Requirements	Potential to Occur	Rationale
<i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i> Choris' popcornflower	None/None G3T1Q/S1 1B.2	Annual herb. Chaparral, coastal prairie, coastal scrub. Mesic sites. Elevations: 10-525 ft. (3-160 m.) Blooms Mar-Jun.	Not Expected	Natural vegetation communities and mesic soils are not present, and the BSA is isolated by development.
<i>Potentilla hickmanii</i> Hickman's cinquefoil	FE/SE G1/S1 1B.1	Perennial herb. Closed-cone coniferous forest, coastal bluff scrub, marshes and swamps, meadows and seeps. Freshwater marshes, seeps, and small streams in open or forested areas along the coast. Elevations: 35-490 ft. (10-149 m.) Blooms Apr-Aug.	Not Expected	Natural vegetation communities and aquatic habitats are not present, and the BSA is isolated by development.
<i>Ramalina thrausta</i> angel's hair lichen	None/None G5?/S2S3 2B.1	Fruticose lichen (epiphytic). North coast coniferous forest. On dead twigs and other lichens. Elevations: 245-1410 ft. (75-430 m.)	Not Expected	Natural vegetation communities are not present; this species was not observed, and the BSA is isolated by development.
<i>Rosa pinetorum</i> pine rose	None/None G2/S2 1B.2	Perennial shrub. Cismontane woodland, closed-cone coniferous forest. Elevations: 5-3100 ft. (2-945 m.) Blooms May-Jul.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Stebbinsoseris decipiens</i> Santa Cruz microseris	None/None G2/S2 1B.2	Annual herb. Broadleafed upland forest, chaparral, closed-cone coniferous forest, coastal prairie, coastal scrub, valley and foothill grassland. Open areas in loose or disturbed soil, usually derived from sandstone, shale or serpentine, on seaward slopes. Elevations: 35-1640 ft. (10-500 m.) Blooms Apr-May.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Sulcaria spiralifera</i> twisted horsehair lichen	None/None G3G4/S2 1B.2	Fruticose lichen (epiphytic). Coastal dunes, north coast coniferous forest. Usually on conifers. Elevations: 0-295 ft. (0-90 m.)	Not Expected	Natural vegetation communities are not present; this species was not observed, and the BSA is isolated by development.
<i>Trifolium buckwestiorum</i> Santa Cruz clover	None/None G2/S2 1B.1	Annual herb. Broadleafed upland forest, cismontane woodland, coastal prairie. Moist grassland. Gravelly margins. Elevations: 345-2000 ft. (105-610 m.) Blooms Apr-Oct.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Trifolium hydrophilum</i> saline clover	None/None G2/S2 1B.2	Annual herb. Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. Elevations: 0-985 ft. (0-300 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.

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<i>Trifolium polyodon</i> Pacific Grove clover	None/SR G1/S1 1B.1	Annual herb. Closed-cone coniferous forest, coastal prairie, meadows and seeps, valley and foothill grassland. Along small springs and seeps in grassy openings. Elevations: 15-1395 ft. (5-425 m.) Blooms Apr-Jun (Jul).	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.
<i>Trifolium trichocalyx</i> Monterey clover	FE/SE G1/S1 1B.1	Annual herb. Closed-cone coniferous forest. Openings, burned areas, and roadsides. Sandy soils. Elevations: 100-1000 ft. (30-305 m.) Blooms Apr-Jun.	Not Expected	Natural vegetation communities are not present; this species was not observed during its blooming period, and the BSA is isolated by development.

BSA = Biological Study Area; ft. = feet; m. = meter

Regional Vicinity refers to within a nine-quad search radius of site (in this case, a seven-quad search was conducted).

Status (Federal/State)

- FE = Federal Endangered
- FT = Federal Threatened
- SE = State Endangered
- ST = State Threatened
- SR = State Rare

CRPR (California Native Plant Society California Rare Plant Rank)

- 1B = Rare, Threatened, or Endangered in California and elsewhere
- 2B = Rare, Threatened, or Endangered in California, but more common elsewhere

CRPR Threat Code Extension

- .1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
- .2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
- .3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

Other Statuses

- G1 or S1 Critically Imperiled Globally or Subnationally (state)
- G2 or S2 Imperiled Globally or Subnationally (state)
- G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4/5 or S4/5 Apparently secure, common and abundant

Additional notations may be provided as follows

- T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority
- ? – Inexact numeric rank

Special-Status Wildlife Species in the Regional Vicinity of the Project Site

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Invertebrates				
<i>Bombus crotchii</i> Crotch bumble bee	None/SCE G2/S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> .	Low Potential	Flowering plants are present; however, natural vegetation communities are not, and no beehives were observed.
<i>Bombus occidentalis</i> western bumble bee	None/SCE G3/S1	Once common and widespread, species has declined precipitously from central CA to southern B.C., perhaps from disease.	Low Potential	Flowering plants are present; however, natural vegetation communities are not, and no beehives were observed.
<i>Danaus plexippus plexippus</i> pop. 1 monarch - California overwintering population	FC/None G4T1T2/S2	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	Not Expected	Suitable wintering habitat with a wind-protecting grove of trees is not present.
<i>Euphilotes enoptes smithi</i> Smith's blue butterfly	FE/None G5T1T2/S2	Most commonly associated with coastal dunes and coastal sage scrub plant communities in Monterey and Santa Cruz counties. Hostplant: <i>Eriogonum latifolium</i> and <i>Eriogonum parvifolium</i> are utilized as both larval and adult foodplants.	Not Expected	Native coastal dune and coastal sage scrub plant communities are not present, and this species host plants were not observed.
Fish				
<i>Eucyclogobius newberryi</i> tidewater goby	FE/None G3/S3	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	Not Expected	Brackish water habitats are not present.
<i>Lavinia exilicauda harengus</i> Monterey hitch	None/None G4T3/S3 SSC	Aquatic, Klamath/North coast flowing waters, Klamath/North coast standing waters, Riparian forest.	Not Expected	Natural aquatic habitats with standing water and riparian areas are not present.
<i>Oncorhynchus mykiss irideus</i> pop. 9 steelhead - south-central California coast DPS	FT/None G5T2Q/S2	Federal listing refers to runs in coastal basins from the Pajaro River south to, but not including, the Santa Maria River.	Not Expected	Natural aquatic habitats with sufficient flow and substrates are not present.

City of Seaside
Fire Station No. 2 Project

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Spirinchus thaleichthys</i> longfin smelt	FC/ST G5/S1	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 parts per trillion but can be found in completely freshwater to almost pure seawater.	Not Expected	Natural estuarine habitats are not present.
Reptiles				
<i>Anniella pulchra</i> Northern California legless lizard	None/None G3/S2S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.	Moderate Potential	Sandy soils are present; however, the BSA is isolated from known populations West of State Route 1 by development.
<i>Emys marmorata</i> western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Not Expected	Natural aquatic habitats with aquatic vegetation are not present, and the BSA is isolated by development from aquatic habitats.
<i>Phrynosoma blainvillii</i> coast horned lizard	None/None G3G4/S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	Not Expected	Natural vegetation communities with sandy washes are not present, and the BSA is isolated by development from known populations.
<i>Thamnophis hammondi</i> two-striped gartersnake	None/None G4/S3S4 SSC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected	Natural aquatic habitats with aquatic vegetation are not present, and the BSA is isolated by development from aquatic habitats.
Amphibians				
<i>Ambystoma californiense</i> pop. 1 California tiger salamander - central California DPS	FT/ST G2G3T3/S3 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.	Not Expected	Aquatic habitats are not present, and the BSA is isolated by development from known populations.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Ambystoma macrodactylum</i> <i>croceum</i> Santa Cruz long-toed salamander	FE/SE G5T1T2/S1S2 FP	Wet meadows near sea level in a few restricted locales in Santa Cruz and Monterey counties. Aquatic larvae prefer shallow (<12 inches) water, using clumps of vegetation or debris for cover. Adults use mammal burrows.	Not Expected	Aquatic habitats are not present, and the BSA is isolated by development from aquatic habitats.
<i>Rana boylei</i> pop. 4 foothill yellow-legged frog - central coast DPS	FPT/SE G3T2/S2	San Francisco Peninsula and Diablo Range south of San Francisco Bay Estuary, and south through the Santa Cruz and Gabilan Mountains east of the Salinas River in the southern inner Coast Ranges. Partly shaded shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying and at least 15 weeks to attain metamorphosis.	Not Expected	Aquatic habitats are not present, and the BSA is isolated by development from aquatic habitats.
<i>Rana draytonii</i> California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	Not Expected	Aquatic habitats are not present, and the BSA is isolated by development from aquatic habitats.
<i>Spea hammondi</i> western spadefoot	None/None G2G3/S3S4 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Not Expected	Aquatic habitats are not present, and the BSA is isolated by development.
<i>Taricha torosa</i> Coast Range newt	None/None G4/S4 SSC	Coastal drainages from Mendocino County to San Diego County. Lives in terrestrial habitats and will migrate over 1 km to breed in ponds, reservoirs and slow-moving streams.	Not Expected	Aquatic habitats are not present, and the BSA is isolated by development from known populations.

City of Seaside
Fire Station No. 2 Project

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
Birds				
<i>Agelaius tricolor</i> tricolored blackbird	None/ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected	Aquatic habitats with emergent vegetation are not present.
<i>Asio flammeus</i> short-eared owl	None/None G5/S3 SSC	Found in swamp lands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Not Expected	Suitable swamp and grassland habitats are not present.
<i>Athene cucularia</i> burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Not Expected	Suitable grassland habitats are not present, and the BSA is isolated by development from open dry habitat.
<i>Buteo regalis</i> ferruginous hawk	None/None G4/S3S4 WL	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Low Potential	The site may provide marginal foraging habitat and prey species, however the BSA is surrounded by development and is isolated from open chaparral habitats to the east on the former Fort Ord.
<i>Charadrius nivosus nivosus</i> western snowy plover	FT/None G3T3/S3 SSC	Sandy beaches, salt pond levees and shores of large alkali lakes. Needs sandy, gravelly or friable soils for nesting.	Not Expected	Suitable sandy beaches and shores are not present.
<i>Coturnicops noveboracensis</i> yellow rail	None/None G4/S1S2 SSC	Summer resident in eastern Sierra Nevada in Mono County. Freshwater marshlands.	Not Expected	Aquatic habitats with emergent vegetation are not present.
<i>Cypseloides niger</i> black swift	None/None G4/S2 SSC	Coastal belt of Santa Cruz and Monterey counties; central and southern Sierra Nevada; San Bernardino and San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely.	Not Expected	Coastal cliff and canyon habitats are not present.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Elanus leucurus</i> white-tailed kite	None/None G5/S3S4 FP	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Low Potential	Open habitat with small mammal burrows is present, however the trees in the BSA are either not tall or dense enough for nesting, and no large stick nests were observed.
<i>Eremophila alpestris actia</i> California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.	Not Expected	Coastal Short-grass prairie and meadow habitats are not present.
<i>Falco mexicanus</i> prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.	Not Expected	Dry open grasslands and cliffs are not present.
<i>Falco peregrinus anatum</i> American peregrine falcon	FD/SD G4T4/S3S4 FP	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected	Aquatic habitats and cliffs or tall buildings are not present.
<i>Laterallus jamaicensis coturniculus</i> California black rail	None/ST G3T1/S1 FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	Not Expected	Aquatic habitats with emergent vegetation are not present.
<i>Pelecanus occidentalis californicus</i> California brown pelican	FD/SD G4T3T4/S3 FP	Colonial nester on coastal islands just outside the surf line. Nests on coastal islands of small to moderate size which afford immunity from attack by ground-dwelling predators. Roosts communally.	Not Expected	Suitable coastal habitats are not present.
<i>Rallus obsoletus obsoletus</i> California Ridgway's rail	FE/SE G3T1/S1 FP	Salt water and brackish marshes traversed by tidal sloughs in the vicinity of San Francisco Bay. Associated with abundant growths of pickleweed but feeds away from cover on invertebrates from mud-bottomed sloughs.	Not Expected	Aquatic habitats with emergent vegetation are not present.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Riparia riparia</i> bank swallow	None/ST G5/S2	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not Expected	Riparian habitats with cliffs and banks are not present.
Mammals				
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls and ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.	Not Expected	Natural coniferous or deciduous forests with caves or cave-like structures are not present.
<i>Eumetopias jubatus</i> Steller sea lion	FD/None G3/S2	Breeds on Ano Nuevo, San Miguel and Farallon islands, Point St. George, and Sugarloaf. Hauls-out on islands and rocks. Needs haul-out and breeding sites with unrestricted access to water, near aquatic food supply and with no human disturbance.	Not Expected	Marine habitats are not present, and the BSA is isolated by development from marine areas.
<i>Neotoma macrotis luciana</i> Monterey dusky-footed woodrat	None/None G5T3/S3 SSC	Forest habitats of moderate canopy and moderate to dense understory. Also in chaparral habitats. Nests constructed of grass, leaves, sticks, feathers, etc. Population may be limited by availability of nest materials.	Not Expected	Natural forest habitats are not present, woodrat middens were not observed, and the BSA is isolated by development.
<i>Sorex ornatus salarius</i> Monterey shrew	None/None G5T1T2/S1S2 SSC	Riparian, wetland and upland areas in the vicinity of the Salinas River delta. Prefers moist microhabitats. feeds on insects and other invertebrates found under logs, rocks, and litter.	Not Expected	Natural forest habitats are not present, and the BSA is isolated by development from the Salinas River.

Scientific Name Common Name	Status Fed/State ESA CDFW	Habitat Requirements	Potential to Occur	Rationale
<i>Taxidea taxus</i> American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Not Expected	Natural dry open grassland habitats are not present, and the BSA is isolated by development from open grasslands.

ft. = feet; km = kilometer

Regional Vicinity refers to within a nine-quad search radius of site (in this case, a seven-quad search was conducted).

Status (Federal/State)

- FE = Federal Endangered
- FT = Federal Threatened
- FPT = Federal Proposed Threatened
- FD = Federal Delisted
- FC = Federal Candidate
- SE = State Endangered
- ST = State Threatened
- SCE = State Candidate Endangered
- SD = State Delisted
- SSC = CDFW Species of Special Concern
- FP = CDFW Fully Protected
- WL = CDFW Watch List

Other Statuses

- G1 or S1 Critically Imperiled Globally or Subnationally (state)
- G2 or S2 Imperiled Globally or Subnationally (state)
- G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
- G4/5 or S4/5 Apparently secure, common and abundant

Additional notations may be provided as follows

- T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
- Q – Questionable taxonomy that may reduce conservation priority

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Appendix D

Cultural Resources Assessment

CONFIDENTIAL APPENDIX

**To protect sensitive information about the location and nature of cultural resources, this appendix is not included in the public draft of this document.

Appendix E

Energy Consumption Calculations

Seaside Fire Station No. 2 Project

Last Updated: 6/23/2023

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors [1]:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529
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Values above are expressed in gallons per horsepower-hour/BSFC.

Construction Equipment	#	CONSTRUCTION EQUIPMENT		Load Factor	Construction Phase	Fuel Used (gallons)
		Hours per Day	Horsepower			
Rubber Tired Dozers	3	8	367	0.4	Site Preparation Phase	8,194
Tractors/Loaders/Backhoes	4	8	84	0.37	Site Preparation Phase	2,572
Rubber Tired Dozers	3	8	367	0.4	Site Preparation Phase	8,194
Tractors/Loaders/Backhoes	4	8	84	0.37	Site Preparation Phase	2,572
Graders	1	8	148	0.41	Grading Phase	5,004
Excavators	1	8	36	0.38	Grading Phase	1,254
Rubber Tired Dozers	1	8	367	0.4	Grading Phase	12,105
Tractors/Loaders/Backhoes	3	8	84	0.37	Grading Phase	8,548
Cranes	1	7	367	0.29	Building Construction Phase	7,719
Forklifts	3	8	82	0.2	Building Construction Phase	4,533
Generator Sets	1	8	14	0.74	Building Construction Phase	955
Tractors/Loaders/Backhoes	3	7	84	0.37	Building Construction Phase	7,517
Welders	1	8	46	0.45	Building Construction Phase	1,907
Air Compressors	1	6	37	0.48	Architectural Coating Phase	883
Pavers	1	8	81	0.42	Paving Phase	1,056
Cement and Mortar Mixers	2	6	10	0.56	Building Construction Phase	261
Paving Equipment	2	6	89	0.36	Paving Phase	1,491
Rollers	2	6	36	0.38	Paving Phase	637
Tractors/Loaders/Backhoes	1	8	84	0.37	Paving Phase	964
Total Fuel Used						76,365
						(Gallons)

Construction Phase	Days of Operation
Site Preparation Phase	44
Grading Phase	195
Building Construction Phase	196
Paving Phase	66
Architectural Coating Phase	141
Total Days	642

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Site Preparation Phase	25.0	35	9.47	583.35
Grading Phase	25.0	15	9.47	1107.99
Building Construction Phase	25.0	5	9.47	363.80
Paving Phase	25.0	20	9.47	500.02
Architectural Coating Phase	25.0	1	9.47	52.34
Total				2,607.50

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
Grading Phase	7.5	1	7.0	0.90
Building Construction Phase	7.5	0	0.0	0.00
Paving Phase	7.5	0	0.0	0.00
Architectural Coating Phase	7.5	0	0.0	0.00
Total				0.90
VENDOR TRIPS				
Site Preparation Phase	7.5	0	0.0	0.00
Grading Phase	7.5	0	0.0	0.00
Building Construction Phase	7.5	3	6.0	395.54
Paving Phase	7.5	0	0.0	0.00
Architectural Coating Phase	7.5	0	0.0	0.00
Total				395.54

Total Gasoline Consumption (gallons)	2,608
Total Diesel Consumption (gallons)	76,761

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2*. September. Available at: <https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf>.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics*. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Seaside Fire Station No. 2 Project

Last Updated: 6/23/2023

Populate one of the following tables (Leave the other blank):

Annual VMT	OR	Daily Vehicle Trips
Annual VMT: 109,977		Daily Vehicle Trips: Average Trip Distance:

Fleet Class	Fleet Mix	Fuel Economy (MPG) [1]	
Light Duty Auto (LDA)	0.457410	Passenger Vehicles	25.0
Light Duty Truck 1 (LDT1)	0.045455	Light-Med Duty Trucks	17.9
Light Duty Truck 2 (LDT2)	0.222765	Heavy Trucks/Other	7.5
Medium Duty Vehicle (MDV)	0.180223	Motorcycles	44
Light Heavy Duty 1 (LHD1)	0.036471		
Light Heavy Duty 2 (LHD2)	0.008907		
Medium Heavy Duty (MHD)	0.011976		
Heavy Heavy Duty (HHD)	0.007589		
Other Bus (OBUS)	0.000919		
Urban Bus (UBUS)	0.000523		
Motorcycle (MCY)	0.021594		
School Bus (SBUS)	0.003012		
Motorhome (MH)	0.003155		

Fleet Mix

Vehicle Type	Percent	Fuel Type	Annual VMT: VMT	Vehicle Trips: VMT	Fuel Consumption (Gallons)
Passenger Vehicles	45.74%	Gasoline	50,305	0.00	2,012
Light-Medium Duty Trucks	44.84%	Gasoline	49,319	0.00	2,755
Heavy Trucks/Other	7.26%	Diesel	7,979	0.00	1,064
Motorcycle	2.16%	Gasoline	2,375	0.00	54

Total Gasoline Consumption (gallons)	4,821
Total Diesel Consumption (gallons)	1,064

Sources:

[1] United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: <https://www.bts.gov/topics/national-transportation-statistics>.

Appendix F

Geotechnical Investigation



GEOTECHNICAL INVESTIGATION



SEASIDE FIRE STATION NO. 2
SEASIDE, CALIFORNIA

FOR
RRM DESIGN GROUP
SAN LUIS OBISPO, CALIFORNIA



CONSULTING GEOTECHNICAL ENGINEERS

2302-M232-E51
MARCH 2023
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March 10, 2023

Project No. 2302-M232-E51

Mr. Michael Scott, Principal
RRM Design Group
3765 South Higuera St. Suite 102
San Luis Obispo, CA 93401

Subject: **Geotechnical Investigation – Design Phase**
Seaside Fire Station No. 2
Northwest Corner of 1st Avenue and Giggling Road
APN 031-151-012
Seaside, California

Dear Mr. Scott,

In accordance with your authorization, we have performed a design-level geotechnical investigation for the proposed fire station located at the northwestern corner of Giggling Road and 1st Avenue in Seaside, California.

The accompanying report presents our conclusions and recommendations as well as the results of the geotechnical investigation on which they are based. The conclusions and recommendations presented in this report are contingent upon our review of the plans during the design phase of the project, and our observation and testing during the construction phase of the project.

Very truly yours,

PACIFIC CREST ENGINEERING INC.

Prepared by:



Chris Johnson, PE
Principal Civil Engineer
C 82630
Expires 9/30/2024

Reviewed by:



Elizabeth M. Mitchell, GE
Associate Geotechnical Engineer
GE 2718
Expires 12/31/2024

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GEOTECHNICAL INVESTIGATION REPORT
Seaside Fire Station No. 2
Seaside, California

I. INTRODUCTION

PURPOSE AND SCOPE

This report describes the geotechnical investigation and presents our conclusions and recommendations for the construction of the proposed fire station in Seaside, California. For purposes of this report, “site” refers to the undeveloped parcel located on the northwest corner of Giggling Road and 1st Street in Seaside, California.

Our scope of services for this project has consisted of:

1. Site reconnaissance to observe the existing conditions.
2. Review of the following published maps and documents:
 - Geologic Map of the Monterey Peninsula and Vicinity, Monterey County, California, Dibblee Jr., 1999.
 - Geologic Map of Monterey County, California, Rosenberg, 2001.
 - Map Showing Relative Earthquake-Induced Landslide Susceptibility of Monterey County, California, Rosenberg, 2001.
 - Map Showing Liquefaction Susceptibility of Monterey County, California, Rosenberg, 2001.
 - Map Showing Relative Fault Hazards of Monterey County, California, Rosenberg, 2001.
 - U.S. Geological Survey (and the California Geologic Survey), 2018, Quaternary fault and fold database for the United States, accessed April 2021, from USGS web site: <https://www.usgs.gov/natural-hazards/earthquake-hazards/hazards>
3. Field exploration including the drilling and logging of eleven (11) geotechnical test borings and three (3) infiltration test borings.
4. Infiltration testing of three (3) test holes in accordance with the Central Coast Low Impact Development Initiative, with procedures outlined in the report titled “Native Soil Assessment for Small Infiltration-Based Storm Water Control Measures”. Our infiltration study followed the “Shallow Quick Infiltration Test” method, as described within Attachment 1 of that document.
5. Laboratory analysis of retrieved soil samples.
6. Engineering analysis of the field and laboratory test results.
7. Preparation of this report documenting our investigation and presenting geotechnical recommendations for the design and construction of the project.



PROJECT LOCATION

The subject site is an undeveloped parcel located at the northwest corner of Giggling Drive and 1st Street in Seaside. Please refer to the Regional Site Map, Figure No. 1, in Appendix A for the general vicinity of the project site, which is approximately located by the following coordinates:

Latitude = 36.64463611 degrees
Longitude = -121.8138167 degrees

PROPOSED IMPROVEMENTS

Based on our review of preliminary plans and discussions with design team, it is our understanding that the project will include the construction of an approximately 12,544 ft² fire station, two parking lots, a multi-story training tower, storage/maintenance buildings, a trash enclosure structure, and fuel storage tanks. The site improvements will also include retaining walls along 1st Street, an approximately 1-acre fire truck driver training area, driveways, walking paths, and patio flatwork. The project will also include bioswales for storm water management, driveway access gates, and underground utilities associated with these improvements.

The vast majority of earthwork activities will be focused on the fire station, parking lots, and firetruck driver's training area. Except for the retaining walls along 1st Street, the excavations for the proposed improvements are expected to be 4 feet or less. Given the relatively shallow excavation depths, we do not expect the need for temporary shoring or extensive cut/fill slopes.

II. INVESTIGATION METHODS

TEST BORINGS

Eleven, 8-inch diameter test borings (Boring B1 through Boring B11) were drilled at the site on January 17 and 18, 2023. The approximate locations of the test borings are shown on Figure No. 2, in Appendix A. The drilling method used was hydraulically operated continuous flight hollow stem augers on a track mounted drill rig. An engineer from Pacific Crest Engineering Inc. was present during the drilling operations to log the soil encountered and to choose sampler type and locations.

The soils encountered in the borings were continuously logged in the field and visually described in accordance with the Unified Soil Classification System (ASTM D2488) as described in the Boring Log Explanation, Figures No. 3 and 4, in Appendix A. The soil classification was verified upon completion of laboratory testing in accordance with ASTM D2487.

Samples retrieved with the track mounted drill rig were obtained by driving a split spoon sampler 18 inches into the ground. This was achieved by dropping a 140-pound hammer a vertical height of 30 inches with an automatic trip hammer. The field blow counts in 6-inch increments were obtained and are reported on the Boring Logs adjacent to each sample as well as the Standard Penetration Test data (SPT). The outside diameter of the samplers used was 3-inch or 2-inch and is designated on the Boring Logs as "L" or "T", respectively. All SPT data has been normalized to a 2-inch O.D. sampler and is reported on the Boring Logs as SPT "N" values. The normalization method used was derived from the second edition of the Foundation Engineering Handbook (H.Y. Fang, 1991). The method utilizes a Sampler Hammer Ratio which is dependent



on the weight of the hammer, height of hammer drop, outside diameter of sampler, and inside diameter of sample.

Appendix A contains the site plan showing the locations of the test borings, our borings logs and an explanation of the soil classification system used. Stratification lines on the boring logs are approximate as the actual transition between soil types may be gradual.

INFILTRATION TESTING

Three (3) infiltration test borings were advanced in the area of the proposed detention/retention basins (Borings P1, P2 and P3). The locations of the infiltration test borings are depicted on the site map included within Appendix A of this report. The infiltration test borings were advanced to depths of 5 to 7 feet below the existing ground surface elevation, as exact grades of the bottom of the bioswale(s) were unknown at the time of our investigation. The "Native Soil Assessment For Small Infiltration-Based Storm water Control Measures" test procedure was followed during the testing of these infiltration test borings.

All infiltration test holes were drilled using a track mounted drill rig equipped with 8-inch diameter augers. An engineer from Pacific Crest Engineering Inc. was present during the drilling operations to log the soil encountered and to verify the infiltration test depths. Approximately 1 to 2 inches of clean, 3/8-inch diameter gravel was placed at the bottom of each boring. A 4-inch diameter perforated pipe was then placed within each test hole, and the annular space backfilled with gravel. The test holes were presoaked for approximately 24 hours prior to infiltration testing.

The infiltration tests were performed in accordance with the Central Coast Low Impact Development Initiative, with procedures outlined in the report titled "Native Soil Assessment for Small Infiltration-Based Storm Water Control Measures". Our infiltration study followed the "Shallow Quick Infiltration Test" method, as described within Attachment 1 of the above referenced document. This procedure is generally described as follows:

1. At the commencement of each test, the water level within the infiltration test boring was adjusted to the top of the test zone (approximately 2 feet above the bottom of the boring). This was accomplished by using a flow meter, allowing the initial volume of water placed within the test boring to be recorded.
2. The water level within each test boring was maintained at a constant head for the initial 30 minutes of the test. The volume of water required to maintain the constant head was recorded.
3. Following the initial 30-minute constant head period, the water elevation was allowed to fall. This portion of the test was continued for a minimum of 2 hours, with water elevation readings being taken every 5- to 20-minutes contingent on the rate of fall. The difference in water elevation was then used to compute the infiltration rate at each time interval.
4. If the test boring were to run out of water during the 2-hour test, it would be refilled to the initial elevation. If the rate of fall was such that the test boring was to run dry following 2 refills (not including the initial fill-up), then the test was concluded.



5. If the rate of fall at any time was less than 6 inches in 2 hours, or if the readings were not stable at the end of the 2-hour test, then the test was continued for an additional 2-hour interval (4 hours total).
6. The final infiltration rate was defined as the average infiltration rate during the last time interval. The last time interval is considered to be the last refill cycle or the last 2 hours of a 4-hour test. All final infiltration rates (I_t) are calculated in ($\text{in}^3/\text{in}^2/\text{hr.}$ or ($\text{in}/\text{hr.}$). The factored infiltration rate (K_i), which includes a factor of safety of 2, was also calculated from the final interval.

A summary of the infiltration test results is provided in Table 1 below. The complete infiltration test sheets are provided within Appendix B of this report.

LABORATORY TESTING

The laboratory testing program was developed to aid in evaluating the engineering properties of the materials encountered at the site. Laboratory tests performed include:

- Moisture Density relationships in accordance with ASTM D2937.
- Gradation testing in accordance with ASTM D1140.
- Direct Shear testing in accordance with ASTM D3080.
- R-Value testing in accordance with CTM 301.
- Corrosivity testing in accordance with CTM 643, 422, and 417.

The results of the laboratory testing are presented on the boring logs opposite the sample tested and/or presented graphically in Appendix A.

III. FINDINGS AND ANALYSIS

GEOLOGIC SETTING

The surficial geology in the project site is mapped as Eolian Deposits (Rosenberg, 2001). These deposits are described as poorly graded silt and sand deposited as extensive coastal dune fields. These deposits are generally described as weakly to moderately consolidated and fine to medium grained. The native soils encountered within our test borings are generally consistent with this description.

SURFACE CONDITIONS

The subject site is situated near the northwestern corner of Giggling Road and 1st Street in Seaside, California. The site is gently flat but slopes up (4H:1V) on the eastern edge to meet the grade of 1st Street. The site is currently undeveloped but shows some signs of minor grading in the areas around 1st Street and Giggling Road as well as unpaved access roads that traverse the parcel. Overhead powerline poles are located along the southern edge of the parcel and run parallel to Giggling Road. The site is currently undeveloped, sparsely wooded and covered in native grasses, ice plant and shrubbery native to the Monterey Bay area.



SUBSURFACE CONDITIONS

Our subsurface exploration program included the advancement of eleven (11) test borings and three (3) infiltration test borings. All test borings were drilled as close to proposed improvements as possible, given the preliminary layout drawings that were available to us at the time. The remaining three (3) infiltration borings were located as close as possible to proposed bioswale areas. The exploratory borings extended from 16½ to 51½ feet below existing grades, while the infiltration test boings within the proposed bioswale areas extended from 5 to 7 feet below existing grades. The soil profiles and classifications, laboratory test results and groundwater conditions encountered for each test boring are presented in the Logs of Test Borings, in Appendix A. The general subsurface conditions are described below.

The upper surficial soils within the site were generally classified as silty sand or sand with silt and extended from about 9½ to 19½ below existing grades. These soils were generally poorly graded and fine to medium grained. At these depths, the soil was generally described as very loose to medium dense.

Underlying the surficial soils described above our borings encountered a layer of poorly graded sand that extended to the maximum explored depth of 51½. These sands were generally medium to fine grained. At these depths, the soil was generally described as medium dense to dense.

Groundwater was not encountered in our test borings and no evidence of shallow ground water was observed at the site.

Please refer the Logs of Test Borings in Appendix A, for a more detailed description of the subsurface conditions encountered in each of our test borings at the subject site.

INFILTRATION TEST RESULTS

A summary of the infiltration test results is provided below. The complete infiltration test sheets are provided within Appendix B of this report.

Table No. 1 – Summary of Infiltration Test Results

Test No.	Test Depth (ft)	Soil Type within Test Zone	Soil Gradation			Infiltration Rate, I _t (in/hr.)	Factored Infiltration Rate, K _f (in/hr.)
			Gravel (%)	Sand (%)	Fines (%)		
P1	4.6 to 6.6	Silty Sand	0.0	85.6	14.4	0.6	0.4
P2	3.8 to 5.8	Silty Sand	0.0	84.0	16.0	1.4	0.9
P3	2.8 to 4.8	Silty Sand	0.0	80.9	19.1	0.3	0.1

Infiltration tests were performed in 8-inch diameter borings. In general, we expect tests performed in larger diameter borings to generate faster infiltration rates. This is due to a key assumption in the Porchet Method for calculating infiltration rates which assumes the horizontal and vertical hydraulic conductivities of a soil are equal. In reality, the vertical hydraulic conductivity of a soil is typically greater than the horizontal. Consequently, infiltration rates generally increase if the surface area at the base of the boring is increased.



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This testing was conducted during a relatively wet winter following several years of regional drought. As a result, the current saturation levels of the in-situ soils may be higher than normal. Generally, infiltration rates tend to decrease as the relative saturation of the soil increases. Therefore, the infiltration rates as achieved during this site-specific investigation may increase or decrease depending on the relative saturation of the soils. As a result, we would recommend that the civil engineer apply a safety factor to the design values as a way to account for seasonal variations. Please note that the "Factored Infiltration Rate, K_f " provided above includes a factor of safety equal to two. The actual factor of safety should be determined by the project civil engineer.

SOIL CORROSIVITY

In order to address the corrosivity potential at the subject site, testing was performed on two (2) samples of the on-site soils likely to come in contact with concrete and buried metallic structures. The results are summarized as follows:

TABLE No. 2 - Corrosivity Test Summary

Sample	Approximate Sample Depth (ft)	Soil Resistivity	Chloride	Sulfate (water soluble)	pH
		Ohm-cm	mg/kg	mg/kg	
2-3-1	6.0	8177	4	13	6.9
8-1-1	2.0	13930	30	24	5.3

According to the Cal Trans Corrosion Guidelines, Version 3.2 (May 2021), a site may be considered corrosive to foundation elements if one or more of the following conditions exist:

- The soil resistivity is less than 1,100 ohm-cm
- Chloride concentration is greater than or equal to 500 mg/Kg (ppm)
- Sulfate concentration is greater than or equal to 1500 mg/Kg (ppm)
- The soil pH is 5.5 or less

Furthermore, According to Pacific Gas and Electric (PG&E) Electric & Gas Service Requirements (TD-7001M) 2020-2021, a site may be considered corrosive if one or more of the following conditions exist:

- The soil resistivity is less than 3,000 ohm-cm
- The soil pH is less than 4.5 or greater than 9

In comparing the test results to the threshold values, we have determined that the soils likely to be in contact with concrete and buried metallic structures are potentially corrosive. The corrosion potential for any imported select fill should also be tested for corrosivity. Please refer to Appendix A for a site plan that shows the corrosivity test boring locations (Figure 2), associated boring logs, and specific results of the corrosivity testing by the analytical laboratory (Figure 24 & 25).



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FAULTING AND SEISMICITYFaulting

Mapped faults which have the potential to generate earthquakes that could significantly affect the subject site are listed in Table No. 3. The fault distances are approximate distances based on the U.S. Geological Survey and California Geological Survey, Quaternary fault and fold database, accessed in April 2021 from the USGS website (<https://www.usgs.gov/natural-hazards/earthquake-hazards/hazards>) and overlaid onto Google Earth.

Table No. 3 - Distance to Significant Faults

Fault Name	Distance (miles)	Direction
Reliz	2	Northeast
Monterey Bay-Tularcitos	4½	Southwest
San Gregorio	12½	Southwest
Zayante-Vergeles	16½	Northeast
San Andreas	20½	Northeast
Sargant	24½	Northeast
Calaveras	26½	Northeast

Seismic Shaking and CBC Design Parameters

Due to the proximity of the site to active and potentially active faults, it is reasonable to assume the site will experience high intensity ground shaking during the lifetime of the project. Structures founded on thick, soft soil deposits are more likely to experience more destructive shaking, with higher amplitude and lower frequency, than structures founded on bedrock. Generally, shaking will be more intense closer to earthquake epicenters. Thick, soft soil deposits large distances from earthquake epicenters, however, may result in seismic accelerations significantly greater than expected in bedrock.

Selection of seismic design parameters should be determined by the project structural designer. The site coefficients and seismic ground motion values shown in the table below were developed based on CBC 2022 incorporating the ASCE 7-16 standard, and the project site location.

Table No. 4 - 2022 CBC Seismic Design Parameters^{1,2}

Seismic Design Parameter	ASCE 7-16 Value
Site Class	D
Spectral Acceleration for Short Periods	$S_s = 1.393g$
Spectral Acceleration for 1-second Period	$S_1 = 0.506g$
Short Period Site Coefficient	$F_a = 1.0$



Seismic Design Parameter	ASCE 7-16 Value
1-Second Period Site Coefficient	$F_v = N/A^2$
MCE Spectral Response Acceleration for Short Period	$S_{MS} = 1.393g$
MCE Spectral Response Acceleration for 1-Second Period	$S_{M1} = N/A^2$
Design Spectral Response Acceleration for Short Period	$S_{DS} = 0.929g$
Design Spectral Response Acceleration for 1-Second Period	$S_{D1} = N/A^2$
Seismic Design Category ³	D

Note 1: Design values have been obtained by using the ASCE Hazard Tool at <https://asce7hazardtool.online>

Note 2: Per Section 11.4.8 of ASCE 7-16, a ground motion hazard analysis may be required for Site Class D sites with S_1 greater than or equal to 0.2. The values provided in this table assume that the value of the seismic response coefficient C_s can be determined by the structural engineer based on the Exceptions as detailed in Section 11.4.8. This should be verified by the structural designer and Pacific Crest Engineering, Inc. should be contacted for revised parameters if these Exceptions are not applicable to the project.

Note 3: The Seismic Design Category assumes a structure with IV occupancy as defined by Table 1604.5 of the 2022 CBC. Pacific Crest Engineering Inc. should be contacted for revised seismic design parameters if the proposed structure has a different occupancy rating than that assumed.

The recommendations of this report are intended to reduce the potential for structural damage to an acceptable risk level, however strong seismic shaking could result in damage to improvements and the need for post-earthquake repairs. It should be assumed that exterior improvements such as pavements or sidewalks may also need to be repaired or replaced following strong seismic shaking.

GEOTECHNICAL HAZARDS

A quantitative analysis of geotechnical hazards was beyond our scope of services for this project. In general however, the geotechnical hazards associated with projects in the Seaside area include seismic shaking (discussed above), ground surface fault rupture, liquefaction, lateral spreading and landsliding. A qualitative discussion of these hazards is presented below.

Ground Surface Fault Rupture

Pacific Crest Engineering Inc. has not performed a specific investigation for the presence of active faults at the project site. Based upon our review of the U.S. Geological Survey, Quaternary fault and fold database 2022, the project site is not underlain by any active or potentially active faults.

Ground surface fault rupture typically occurs along the surficial traces of active faults during significant seismic events. Since the nearest known active, or potentially active fault trace is mapped approximately 2 miles from the site, it is our opinion that the potential for ground surface fault rupture to occur at the site should be considered low.

Liquefaction and Lateral Spreading

Based upon our review of the regional liquefaction maps (Rosenberg, 2001) the subject site and surrounding area lie within an area mapped as having a low potential for liquefaction.



Liquefaction tends to occur in loose, saturated fine-grained sands and coarse silt, or clays with low plasticity. We did not encounter groundwater during our field investigation. Consequently, it is our opinion that the potential for liquefaction to occur at the subject site may be considered low.

Liquefaction-induced lateral spreading occurs when a liquefied soil mass fails toward an open slope face or fails on an inclined topographic slope. Our analysis indicates that the site has a low potential for liquefaction, consequently the potential for lateral spreading is also considered low.

Landsliding

Based upon our review of the Map Showing Relative Earthquake-Induced Landsliding of Monterey County, California (Rosenberg, 2001), the subject site and surrounding area lie within an area mapped as having a low potential for earthquake-induced landsliding.

The subject site and immediate vicinity are relatively flat to gently sloping. Provided our recommendations are followed, it is our opinion that the potential for shallow landsliding to occur and adversely affect the proposed development may be considered low.

Slope failures can also occur where surface drainage is allowed to concentrate onto unprotected slopes. Appropriate landscaping and good control of surface drainage around the project area becomes very important to reduce potential for shallow slumping of slopes. Erosion control measures should be implemented and maintained. Under no circumstances should surface runoff be directed toward, or discharged upon, any topographic slopes.

Seismically Induced Settlement

Seismically induced settlement occurs as a result of the compression of intergranular void space during a seismic loading event. In order to assess this hazard, we have evaluated the potential for the upper 50 feet of soil column to settle under seismic “dynamic” loading.

The potential for seismically induced dry sand settlement was evaluated quantitatively for this project, based upon the data obtained from our exploratory test borings. Our analysis utilized the software program LiqSVs Version 1.2.1.6, which is based upon the most recent recommendations of the NCEER Workshop and the work of Pradel 1998. The program calculates the seismically induced settlement due to “dynamic” compaction of loose, dry sands above the design water table.

The following criteria were used in our analysis:

- Peak Ground Acceleration (PGA_M) value of 0.58g determined in accordance with section 1803A.5.12 of the California Building Code.
- Earthquake magnitude 7.1 occurring on the San Andreas Fault, as derived from a deaggregation tool available from the USGS website.
- Groundwater elevation greater than 50 feet below ground surface.



Using the above parameters and subsurface data obtained during the course of our investigation, we have estimated seismically induced settlement on the order of 1 to 2 inches. Please refer to Appendix C for full model parameters and results.

IV. DISCUSSION AND CONCLUSIONS

GENERAL

1. The results of our investigation indicate that the proposed improvements are feasible from a geotechnical engineering standpoint, provided our recommendations are included in the design and construction of the project.
2. Grading and foundation plans should be reviewed by Pacific Crest Engineering Inc. during their preparation and prior to contract bidding.
3. Pacific Crest Engineering Inc. should be notified at least four (4) working days prior to any site clearing and grading operations on the property in order to observe the stripping and disposal of unsuitable materials, and to coordinate this work with the grading contractor. During this period, a pre-construction conference should be held on the site, with at least the client or their representative, the grading contractor, and one of our engineers present. At this meeting, the project specifications and the testing and inspection responsibilities will be outlined and discussed.
4. The findings, conclusions and recommendations provided in this report are based on the understanding that Pacific Crest Engineering will remain as Geotechnical Engineer of Record throughout the design and construction phase of the project. The validity of the findings, conclusions and recommendations contained in this report are dependent upon our review of project plans as well as an adequate testing and observation program during the construction phase. Field observation and testing must therefore be provided by a representative of Pacific Crest Engineering Inc., to enable us to form an opinion as to whether the extent of work related to earthwork or foundation excavation complies with the project plans, specifications and our geotechnical recommendations. Pacific Crest Engineering assumes no responsibility for any site earthwork that is performed without the full knowledge and direct observation of Pacific Crest Engineering Inc.

PRIMARY GEOTECHNICAL CONSIDERATIONS

5. Based upon the results of our investigation, it is our opinion that the primary geotechnical issues associated with the design and construction of the proposed project are the following:
 - a. Loose and Compressible Soils Beneath Foundations and Concrete Slabs-On-Grade: Loose and compressible native soils of varying depth underlie the site. Foundations and concrete slabs-on-grade underlain by compressible material may be subject to settlement and distress. In order to reduce potential settlement and distress we recommend that soils underlying proposed foundations, concrete slabs and/or pavement sections be subexcavated as recommended below and recompacted as engineered fill. Detailed recommendations for earthwork, foundations, and concrete slabs-on-grade are presented in the following sections of this report.
 - b. Seismically Induced Settlement: The soils underlying the site have the potential for settlement during a strong seismic event. Calculated seismically induced settlements are on the order of 1 to



2 inches. Similar to our mitigation approach for loose surficial soils, this hazard may also be reduced by over excavating the loose surficial soils and bringing the building pad up to design grades with engineered fill. Detailed recommendations for earthwork, foundations, and concrete slabs-on-grade are presented in the following sections of this report.

- c. *Strong Seismic Shaking:* The project site is located within a seismically active area and strong seismic shaking is expected to occur within the design lifetime of the project. Improvements should be designed and constructed in accordance with the most current CBC and the recommendations of this report to minimize reaction to seismic shaking. Structures built in accordance with the latest edition of the California Building Code have an increased potential for experiencing relatively minor damage which should be repairable, however strong seismic shaking could result in damage to improvements and the need for post-earthquake repairs.

V. RECOMMENDATIONS

GENERAL EARTHWORK

Clearing and Stripping

1. The initial preparation of the site may consist of demolition of portions of any existing structures and their foundations and removal of debris. All foundation elements from existing structures must be completely removed from the building areas. Septic tanks and leaching lines, if found, must be completely removed. The extent of this soil removal will be designated by a representative of Pacific Crest Engineering Inc. in the field. This material must be removed from the site.
2. Any voids created by the removal of old structures and their foundations, septic tanks, and leach lines must be backfilled with properly compacted engineered fill which meets the requirements of this report.
3. Any wells encountered shall be capped in accordance with the requirements and approval of the County Health Department. The strength of the cap shall be equal to the adjacent soil and shall not be located within 5 feet of a structural footing.
4. Surface vegetation and organically contaminated topsoil should then be removed ("stripped") from the area to be graded. In addition, any remaining debris or large rocks must also be removed (this includes asphalt or rocks greater than 2 inches in greatest dimension). This material may be stockpiled for future landscaping.
5. It is anticipated that the depth of stripping may be 2 to 6 inches. Final required depth of stripping must be based upon visual observations by a representative of Pacific Crest Engineering Inc., in the field. The required depth of stripping will vary based upon the type and density of vegetation across the project site and with the time of year.

Subgrade Preparation

6. Areas of man-made fill, if encountered, will need to be completely excavated to undisturbed native material. The excavation process should be observed, and the extent designated by a representative of



Pacific Crest Engineering Inc., in the field. Any voids created by fill removal must be backfilled with properly compacted engineered fill.

7. After clearing and stripping are completed the following subexcavation depths are recommended:

Exterior concrete slabs-on-grade/flatwork: 12 inches below design soil subgrade elevation.
Structural pavement sections: 12 inches below design soil subgrade elevation
Structural foundations/interior concrete slabs: 5 feet below design ground surface, or 3 feet below bottom of footing, whichever is greater.

Following subexcavation to the recommended depths, the exposed subgrade soil should then be scarified 8 inches, moisture conditioned and compacted as outlined below.

8. Subexcavations should extend at least 5 feet horizontally beyond structural foundations and at least 3 feet horizontally beyond pavements and concrete flatwork.
9. Final depth of subexcavation should be determined by a representative of Pacific Crest Engineering Inc., in the field.

Material for Engineered Fill

10. Native or imported soil proposed for use as engineered fill should meet the following requirements:

- a. free of organics, debris, and other deleterious materials,
- b. free of "recycled" materials such as asphaltic concrete, concrete, brick, etc.,
- c. granular in nature, well graded, and contain sufficient binder to allow utility trenches to stand open,
- d. free of rocks in excess of 2 inches in size.

11. In addition to the above requirements, import fill should have a Plasticity Index between 4 and 12, and a minimum Resistance "R" Value of 30, and be non-expansive.

12. Samples of any proposed imported fill planned for use on this project should be submitted to Pacific Crest Engineering Inc. for appropriate testing and approval not less than ten (10) working days before the anticipated jobsite delivery. This includes proposed import trench sand, drain rock and for aggregate base materials. Imported fill material delivered to the project site without prior submittal of samples for appropriate testing and approval must be removed from the project site.

Engineered Fill Placement and Compaction

13. Following any necessary subexcavations and/or subgrade preparation, areas should be brought up to design grades with engineered fill that is moisture conditioned and compacted according to the recommendations of this report. This should result in a minimum of 36 inches of engineered fill beneath all structural foundations and interior concrete slabs, and 12 inches beneath exterior concrete slabs-on-grade and pavement subgrades. Recompact sections should extend at least 5 feet horizontally beyond all foundations and 3 feet beyond the edges of exterior concrete slabs/flatwork and pavements.



14. Engineered fill should be placed in maximum 8-inch lifts, before compaction, at a water content which is within 1 to 3 percent of the laboratory optimum value.
15. The soil on the project site should be compacted as follows:
 - a. In pavement areas the upper 12 inches of subgrade, and all aggregate subbase and aggregate base, should be compacted to a minimum of 95% of its maximum dry density,
 - b. In pavement areas all utility trench backfill should be compacted to 95% of its maximum dry density,
 - c. All engineered fill below structural foundations and interior concrete slabs should be compacted to a minimum of 95% of its maximum dry density.
 - d. All remaining soil on the project site should be compacted to a minimum of 90% of its maximum dry density.
16. The maximum dry density will be obtained from a laboratory compaction curve run in accordance with ASTM Procedure #D1557. This test will also establish the optimum moisture content of the material. Field density testing will be performed in accordance with ASTM Test #D6938 (nuclear method).
17. We recommend field density testing be performed in maximum 1-foot elevation differences. In general terms, we recommend at least one compaction test per 200 linear feet of utility trench or retaining wall backfill, and at least one compaction test per 2,000 square feet of building or structure area. This is a subjective value and may be changed by the geotechnical engineer based on a review of the final project layout and exposed field conditions.

Cut and Fill Slopes

18. No permanent cut or fill slopes are currently proposed for this project. Should permanent cut or fill slopes be proposed, our office should be contacted for additional recommendations. In general, cut or fill slopes should conform to the recommendations of this section.
19. Fill slopes should be constructed with engineered fill meeting the minimum requirements of this report and have a gradient no steeper than 3:1 (horizontal to vertical).
20. Permanent cut slopes in soil shall not exceed a 4:1 (horizontal to vertical) gradient.
21. The above slope gradients are based on the strength characteristics of the materials under conditions of normal moisture content that would result from rainfall falling directly on the slope, and do not take into account the additional activating forces applied by seepage.
22. The above recommended gradients do not preclude periodic maintenance of the slopes, as minor sloughing and erosion may take place.
23. All flatwork should be set back at least 5 feet horizontally from the top of cut and fill slopes. All foundations should be set back at least 8 feet horizontally from the top of cut and fill slopes.



Soil Moisture and Weather Conditions

24. If earthwork activities are done during or soon after the rainy season, the on-site soils and other materials may be too wet in their existing condition to be used as engineered fill. These materials may require a diligent and active drying and/or mixing operation to reduce the moisture content to the levels required to obtain adequate compaction as an engineered fill. If the on-site soils or other materials are too dry, water may need to be added. In some cases the time and effort to dry the on-site soil may be considered excessive, and the import of aggregate base may be required.

Utility Trench Backfill

25. Utility trenches that are parallel to the sides of the building should be placed so that they do not extend below a line sloping down and away at a 2:1 (horizontal to vertical) slope from the bottom outside edge of all footings.

26. Utility pipes should be designed and constructed so that the top of pipe is a minimum of 24 inches below the finish subgrade elevation of any road or pavement areas. Any pipes within the top 24 inches of finish subgrade should be concrete encased, per design by the project civil engineer.

27. For the purpose of this section of the report, backfill is defined as material placed in a trench starting one foot above the pipe, and bedding is all material placed in a trench below the backfill.

28. Unless concrete bedding is required around utility pipes, free-draining clean sand should be used as bedding. Sand bedding should be compacted to at least 95 percent relative compaction. Clean sand is defined as 100 percent passing the #4 sieve, and less than 5 percent passing the #200 sieve.

29. Approved imported clean sand or native soil should be used as utility trench backfill. Backfill in trenches located under and adjacent to structural fill, foundations, concrete slabs and pavements should be placed in horizontal layers no more than 8 inches thick. This includes areas such as sidewalks, patios, and other hardscape areas. Each layer of trench backfill should be water conditioned and compacted to at least 95 percent relative compaction

30. Utility trenches which carry "nested" conduits (stacked vertically) should be backfilled with a control density fill (such as 2-sack sand\cement slurry) to an elevation one foot above the nested conduit stack. The use of pea gravel or clean sand as backfill within a zone of nested conduits is not recommended.

31. A representative from our firm should be present to observe the bottom of all trench excavations, prior to placement of utility pipes and conduits. In addition, we should observe the condition of the trench prior to placement of sand bedding, and to observe compaction of the sand bedding, in addition to any backfill planned above the bedding zone.

32. Jetting of the trench backfill is not recommended as it may result in an unsatisfactory degree of compaction.

33. Trenches must be shored as required by the local agency and the State of California Division of Industrial Safety construction safety orders.



Excavations and Shoring

34. Temporary shoring is not currently anticipated for this project. Should these requirements change, please contact our office for additional recommendations.

35. It should be understood that on-site safety is the *sole responsibility* of the Contractor, and that the Contractor shall designate a *competent person* (as defined by CAL-OSHA) to monitor the slope excavation prior to the start of each work day, and throughout the work day as conditions change. The competent person designated by the Contractor shall determine if flatter slope gradients are more appropriate, or if shoring should be installed to protect workers in the vicinity of the slope excavation. Refer to Title 8, California Code of Regulations, Sections 1539-1543.

36. All excavations must meet the requirements of 29 CFR 1926.651 and 1926.652 or comparable OSHA approved state plan requirements.

37. The “top” of any temporary cut slope and excavations should be set-back at least ten feet (measured horizontally) from any nearby structure or property line. Any excavations which cannot meet this requirement will need to have a shoring system designed to support steeper sidewall gradients.

FOUNDATIONS

38. At the time we prepared this report, the project plans had not been completed and the exact locations of the structures and foundation details had not been finalized. We request the opportunity to review these items during the final design stages to determine if supplemental recommendations will be required.

Spread Footings

39. Considering the current proposed building area, the soil characteristics including the potential for settlement, and the site preparation recommendations previously provided, it is our opinion that an appropriate foundation system to support proposed structures will consist of reinforced concrete spread footings constructed as an interconnected grid and embedded into engineered fill. This system could consist of continuous exterior footings, in conjunction with interior continuous footings or concrete slabs. The footings and slab should be tied together to form an interconnected foundation grid. Isolated footings are not recommended.

40. Building areas should be underlain by engineered fill that has been prepared as outlined in the Earthwork section of this report.

41. All footings must be trenched at least 24 inches below lowest adjacent compacted pad grade.

42. All footings should be excavated into engineered fill. No footings shall be constructed with the intent of placing engineered fill against the footing after the footing is poured and counting that engineered fill as part of the embedment depth of the footing.



-
43. Footings constructed to the criteria above may be designed using the following parameters:
 - a. Allowable bearing capacity = 2,000 psf for dead plus live loading with a one-third (1/3) increase for seismic or wind loading
 - b. Ultimate friction coefficient between foundations and underlying soil subgrade = 0.30
 - c. Ultimate passive resistance = 300 pounds per cubic foot
 44. Passive soil resistance and friction on the base of the footing may be used in combination with no reduction.
 45. Passive resistance between the sides of the footing and the adjacent soil is only applicable where concrete is placed neatly against undisturbed soil or engineered fill. Voids created by concrete forms should be backfilled with compacted engineered fill or concrete.
 46. The upper 1 foot of soil should be ignored when calculating passive soil resistance.
 47. In computing the pressures transmitted to the soil by the footings, the embedded weight of the footing may be neglected.
 48. Footings located adjacent to utility trenches should be deepened so that the base of the foundation extends below an imaginary 1:1 plane that starts at the base of the trench/pad grade and extends upwards towards the footing.
 49. No footing should be placed closer than 10 feet to the top of a fill slope nor 8 feet from the base of a cut slope.
 50. No footing shall be placed on slopes steeper than 4:1 (h:v). **If the intent is to place the foundation on sloping ground which exceeds 4:1 (h:v), Pacific Crest Engineering Inc. should be contacted for an alternative pier and grade beam foundation design.**
 51. All grade beams, thickened slab edges and other foundation elements which impart structure loads to the soil (from dead, live, wind or seismic loads) should be considered "footings" and constructed according to the recommendations of this section, including required depths below lowest adjacent soil grade.
 52. The footing excavations must be free of loose material prior to placing concrete. The footing excavations should be thoroughly saturated prior to placing concrete.
 53. Footing excavations must be observed by a representative of Pacific Crest Engineering Inc. before placement of formwork, steel and concrete to verify bedding into proper material.
 54. The footings should contain steel reinforcement as determined by the project civil or structural engineer in accordance with applicable CBC or ACI Standards.



SLAB-ON-GRADE CONSTRUCTION

55. All concrete slabs should be underlain by non-expansive engineered fill conforming to the recommendations of this report. In addition to the recommendations presented below, design and construction of concrete slab-on-grade floors should also follow Section 4.505.2 of the 2022 California Green Building Standards Code, which includes installing a vapor retarder in direct contact with concrete and a mix design that addresses bleeding, shrinkage and curling.

56. All exterior non-structural slabs, patios, walkways, etc., should be a minimum of 4 inches in thickness and structurally independent of structural foundation system(s).

57. All interior concrete slabs-on-grade should be underlain by a minimum 6-inch-thick capillary break of $\frac{3}{4}$ inch clean crushed rock (no fines). It is recommended that neither Class II baserock nor sand be employed as the capillary break material.

58. Where floor coverings are anticipated or vapor transmission may be a problem, a vapor retarder/membrane should be placed between the capillary break layer and the floor slab in order to reduce the potential for moisture condensation under floor coverings. We recommend a high-quality vapor retarder at least 10 mil thick and puncture resistant (Stego Wrap or equivalent). The vapor retarder must meet the minimum specifications for ASTM E-1745, Standard Specification for Water Vapor Retarder. Please note that low density polyethylene film (such as Visqueen) may meet minimum current standards for permeability but not puncture resistance. Laps and seams should be overlapped at least six inches and properly sealed to provide a continuous layer beneath the entire slab that is free of holes, tears or gaps. Joints and penetrations should also be properly sealed.

59. Floor coverings should be installed on concrete slabs that have been constructed according to the guidelines outlined in ACI 302.2R and the recommendations of the flooring material manufacturer.

60. Currently, ACI 302-1R and Section 4.505.2 of the 2022 California Green Building Standards Code recommend that concrete slabs to receive moisture sensitive floor coverings be placed directly upon the vapor retarder, with no sand cushion. ACI states that vapor retarders are not effective in preventing residual moisture within the concrete slab from migrating to the surface. Including a low water-to-cement ratio (less than 0.50) and/or admixtures into the mix design are generally necessary to minimize water content, reduce soluble alkali content, and provide workability to the concrete. As noted in CIP 29 (*Concrete in Practice by the National Ready Mixed Concrete Association*), placing concrete directly on the vapor retarder can also create potential problems. If environmental conditions do not permit rapid drying of bleed water from the slab surface the excess bleeding can delay finishing operations (refer to CIP 13, 19 and 20). Most of these problems can be alleviated by using a concrete mix with a low water content, moderate cement factor, and well-graded aggregate with the largest possible size. With the increased occurrence of moisture related floor covering failures, minor cracking of floors placed on a vapor retarder and other problems discussed here are considered a more acceptable risk than failure of floor coverings, and these potential risks should be clearly understood by the Client and Project Owner.

61. If a sand layer is chosen as a cushion for slabs without floor coverings, it should consist of a clean sand. Clean sand is defined as 100 percent passing the #4 sieve, and less than 5 percent passing the #200 sieve.



62. Requirements for pre-wetting of the subgrade soils prior to the pouring of the slabs will depend on the specific soils and seasonal moisture conditions and will be determined by a representative of Pacific Crest Engineering Inc. at the time of construction. It is important that the subgrade soils be properly moisture conditioned at the time the concrete is poured. Subgrade moisture contents should not be allowed to exceed our moisture recommendations for effective compaction and should be maintained until the slab is poured.

63. Recommendations given above for the reduction of moisture transmission through the slab are general in nature and present good construction practice. Moisture protection measures for concrete slabs-on-grade should meet applicable ACI and ASTM standards. Pacific Crest Engineering Inc. are not waterproofing experts. For a more complete and specific discussion of moisture protection within the structure, a qualified waterproofing expert should be consulted to evaluate the general and specific moisture vapor transmission paths and any impact on the proposed construction. The waterproofing consultant should provide recommendations for mitigation of potential adverse impacts of moisture vapor transmission on various components of the structure as deemed appropriate.

64. Final slab thickness, reinforcement, and doweling should be determined by the project civil or structural engineer. The use of welded wire mesh is not recommended for slab reinforcement.

RETAINING WALLS

65. Retaining walls with full drainage should be designed using the following criteria:

- a. The following lateral earth pressure values should be used for design:

Table No. 5 - Active and At-Rest Earth Pressure Values

Maximum Backfill Slope (H:V)	Active Earth Pressure (psf/ft of depth)	At-Rest Earth Pressure (psf/ft of depth)
Level	45	65
4:1	55	80

- b. Should the slope behind the retaining walls be other than shown above, supplemental design criteria will be provided for the active earth or at rest pressures for the particular slope angle.
- c. Active earth pressure values may be used when walls are free to yield an amount sufficient to develop the active earth pressure condition (about ½% of height). The effect of wall rotation should be considered for areas behind the planned retaining wall (pavements, foundations, slabs, etc.). When walls are restrained at the top or to design for minimal wall rotation, at-rest earth pressure values should be used.
- d. A resistance to lateral sliding coefficient of 0.30, and a passive lateral bearing pressure of 300 psf/foot may be assumed. One of these values should be reduced by one-third where both friction and passive resistance are utilized for sliding resistance.



- e. Passive resistance should be neglected over the upper 12 inches of footing depth, or where there is less than 8 feet of horizontal distance from face of footing to face of slope.
- f. For surcharge pressures due to live or dead loads which transmit a force to the wall, please refer to the attached Figure No. 30 included in Appendix A of this report.
- g. If applicable, traffic surcharges on the retaining wall may be simulated by assuming that an additional 2 feet of soil (240 psf) exists on the inboard side of the wall.
- h. Retaining wall foundations bearing upon native soil or engineered fill may be designed using an allowable bearing capacity of 1,750 psf.
- i. If the structural designer wishes to include seismic forces in their design, the wall may be designed using the above active soil pressures plus a horizontal seismic force of $15H^2$ pounds per lineal foot (where H is the height of retained material). The resultant seismic force should be applied at a point $1/3^{\text{rd}}$ above the base of the wall. This force has been estimated using the Mononobe-Okabe method of analysis as modified by Whitman (1990) and Lew and Sitar (2010). A reduced factor of safety for overturning and sliding may be used in seismic design as determined by the structural designer.
- j. The above seismic forces should not be used in combination with at rest lateral soil pressures.

RETAINING WALL DRAINAGE

66. The above design criteria are based on fully drained conditions. Therefore, we recommend that permeable material meeting the State of California Standard Specification Section 68-2.02F, Class 1, Type A, be placed behind the wall, with a minimum width of 12 inches and extending for the full height of the wall to within 1 foot of the ground surface. The top of the permeable material should be covered with Mirafi 140N filter fabric or equivalent and then compacted native soil placed to the ground surface. A 4-inch diameter perforated rigid plastic drain pipe should be installed within 3 inches of the bottom of the permeable material and be discharge to a suitable, approved location. The perforations should be placed downward; oriented along the lower half of the pipe. Neither the pipe nor the permeable material should be wrapped in filter fabric. Please refer to the Typical Retaining Wall Drain Detail, Figure 29, in Appendix A for details.

STRUCTURAL PAVEMENT

Asphalt Concrete Pavement

67. The soils that will comprise the pavement subgrade will in all likelihood be the silty sands and sandy silts that predominate the surficial soils around the development area. The "R" Value results ranged from 66 to 70. We have conservatively assumed an "R" value of 50 for design of pavement sections provided below. This assumption should be verified during construction.

68. The table below provides a flexible pavement design based on the 6th Edition of the Caltrans Highway Design Manual – Chapter 630 (last updated July 1, 2020). Traffic Index (TI) values of $4\frac{1}{2}$ to 6 are provided.



The project civil engineer should verify the required TI for this project. Our office should be contacted for supplemental recommendations for TI values that are not provided below.

TABLE No. 6 - Recommended Pavement Sections

Material	Traffic Index		
	4½	5	6
Asphalt Concrete	2.5 inches	3.0 inches	3.5 inches
Class 2 Aggregate Base, R=78 min.	4.0 inches	4.0 inches	6.0 inches
Compacted Subgrade	8.0 inches	8.0 inches	8.0 inches
<i>Total Section</i>	<i>14.5 inches</i>	<i>15.0 inches</i>	<i>17.5 inches</i>

69. To have the selected pavement sections perform to their greatest efficiency, it is very important that the following items be considered:

- a. Properly scarify and moisture condition the upper 8 inches of the subgrade soil and compact it to a minimum of 95% of its maximum dry density, at a moisture content of 2 to 4% over the optimum moisture content for the soil.
- b. Provide sufficient gradient to prevent ponding of water.
- c. Use only quality materials of the type and thickness (minimum) specified. All aggregate base and subbase must meet Caltrans Standard Specifications for Class 2 materials, and be angular in shape. All Class 2 aggregate base should be ¾ inch maximum in aggregate size.
- d. Compact the base and subbase uniformly to a minimum of 95% of its maximum dry density.
- e. Use ½ inch maximum, Type "A" medium graded asphaltic concrete. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within prescribed limits by Cal Trans Specifications.
- f. Porous pavement systems which consist of porous paving blocks, asphaltic concrete or concrete are generally not recommended due to the potential for saturation of the subgrade soils and resulting increased potential for a shorter pavement life. At a minimum, porous pavement systems should include a layer of Mirafi HP370 geotextile fabric placed on the subgrade soil beneath the porous paving section. These pavement systems should only be used with the understanding by the Owner of the increased potential for pavement cracking, rutting, potholes, etc.
- g. Maintenance should be undertaken on a routine basis.



Portland Cement Concrete Pavement

70. The vehicular Portland Cement Concrete (PCC) pavement recommendations as summarized below are based on design procedures outlined in the Portland Cement Association (PCA) design manual titled *“Thickness Design for Concrete Highway and Street Pavements”* (PCA, 1984) and supplemented by procedures by the American Concrete Pavement Association (ACPA) in their report titled *“Design of Concrete Pavement for Streets and Roads”*(ACPA, 2006).

71. As noted above, the soils that will comprise the pavement subgrade will in all likelihood be the silty sands that predominate the surficial soils around the development area. The “R” Value results for these soils ranged from 66 to 70. These R-values generally correlate to modulus of subgrade reaction “k” values of 180 to 220 pci (PCA, 1984). We have conservatively assumed an “k” value of 200 pci for design of the PCC pavement sections provide below. This assumption should be verified during construction.

72. The design of PCC pavement is a function of the Average Daily Truck Traffic (ADTT), which is defined as the average truck traffic volume in both directions on a section of road over a 24-hour period. It is our understanding that ADTT values have not been tabulated for the subject project; therefore, we have provided PCC pavement sections for an assumed range of ADTT values. An allowable ADTT should be chosen that is greater than what is expected for development.

73. The following table provides minimum PCC thicknesses for a range of assumed ADTT values for PCC pavements with and without concrete curb and gutter.

TABLE No. 7 - PCC Pavement Sections

Allowable ADTT	Minimum PCC Thickness (in)	
	With Curb & Gutter	Without Curb & Gutter
23	5.5	6.5
190	6.0	7.0
1100	6.5	7.5

74. PCC pavement should have a minimum compressive strength of 4000 psi.

75. The PCC pavement sections provided above should be underlain by a minimum of 6 inches of Class 2 aggregate base and 12 inches of compacted subgrade, compacted to 95 percent relative compaction.

76. Expansion and control joints should be determined by the project civil or structural engineer. As a minimum, we recommend that joint spacing be limited to a maximum of 2 feet in each direction for each inch of PCC thickness.

SURFACE DRAINAGE

77. Surface water drainage is the responsibility of the project civil engineer. The following should be considered by the civil engineer in design of the project.



78. Surface water must not be allowed to pond or be trapped adjacent to foundations, or on building pads and parking areas.

79. All roof eaves should be guttered, with the outlets from the downspouts provided with adequate capacity to carry the storm water away from structures to reduce the possibility of soil saturation and erosion. The connection should be in a closed conduit which discharges at an approved location away from structures and graded areas.

80. Slope failures can occur where surface drainage is allowed to concentrate on unprotected slopes. Appropriate landscaping and surface drainage control around the project area is imperative in order to minimize the potential for shallow slope failures and erosion. Stormwater discharge locations should not be located at the top or on the face of any slope.

81. Final grades should be provided with positive gradient away from all foundation elements. Soil grades should slope away from foundations at least 5 percent for the first 10 feet. Impervious surfaces should slope away from foundations at least 2 percent for the first 10 feet. Concentrations of surface runoff should be handled by providing structures, such as paved or lined ditches, catch basins, etc.

82. Irrigation activities at the site should be done in a controlled and reasonable manner.

83. Following completion of the project we recommend that storm drainage provisions and performance of permanent erosion control measures be closely observed through the first season of significant rainfall, to determine if these systems are performing adequately and, if necessary, resolve any unforeseen issues.

84. The building and surface drainage facilities must not be altered nor any filling or excavation work performed in the area without first consulting Pacific Crest Engineering Inc. Surface drainage improvements developed by the project civil engineer must be maintained by the property owner at all times, as improper drainage provisions can produce undesirable affects.

STORM WATER INFILTRATION

85. At the time we prepared this report, the project plans had not been completed and the infiltration locations and system details had not been finalized. We request an opportunity to review these plans during the design stages to determine if supplemental recommendations will be required.

86. It is our understanding that all stormwater will be conveyed to the proposed bioswales along Giggling Road. Our infiltration test borings within the proposed bioswale area generally encountered silty sand within the 2-foot test zone. The fines content (silt fraction) within the infiltration zone ranged from 14.4% to 19.1%. These soil conditions facilitated Final Infiltration Rates (I_f) from 0.3 to 1.4 inches/hour, and Factored Infiltration Rates (K_f) from 0.1 to 0.7 inches/hour. Refer to the Findings and Analysis section above and Appendix B of this report for a complete summary of infiltration data.

87. Infiltration rates tend to decrease as the percentage of fine grained soil increases. Furthermore, fine grained soil can be divided into two sub-groups, silt and clay. The deviation between silt and clay is also dependent on the material's respective particle size, with silt being coarser grained than clay. Therefore, infiltration rates also tend to decrease as a soil transitions from silt to clay. A representative of Pacific Crest



Engineering, Inc. should be present during the grading process to verify that the encountered soils are consistent with the conditions discussed in this report.

88. Infiltration of water adjacent to buildings may saturate surficial soils, resulting in a reduction of shear strength. This reduction in shear strength may trigger or exacerbate differential settlement of the structure. Therefore, we recommend that infiltration systems be setback a minimum of 15 feet horizontally from structural foundation elements. Infiltration areas should also be set back a minimum of 8 feet from all exterior concrete slabs-on-grade, flatwork and pavements. Stormwater features within setback limits should be lined to prevent infiltration.

89. Maintenance of the storm water drainage facilities will be critical in order to maintain the design infiltration rates. The storm water drainage facilities must be inspected and maintained on a routine basis. Repairs and upgrades, whenever necessary, must be made in a timely manner. We recommend that the owner inspect the drainage systems prior to each rainy season, following the first significant rain, and throughout each rainy season. The civil and geotechnical engineers should be consulted if significant drainage problems occur so that the conditions can be observed, and supplemental recommendations can be provided, as necessary.

EROSION CONTROL

90. The surface soils are classified as having high potential for erosion. Therefore, the finished ground surface should be planted with ground cover and continually maintained to minimize surface erosion. For specific and detailed recommendations regarding erosion control on and surrounding the project site, the project civil engineer or an erosion control specialist should be consulted.

91. The surfaces of all cut and fill slopes should be prepared and maintained to reduce erosion. This work, at a minimum, should include track rolling of the slope and effective planting. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided.

PLAN REVIEW

92. We respectfully request an opportunity to review the project plans and specifications during preparation and before bidding to verify that the recommendations of this report have been included and to provide additional recommendations, if needed. These plan review services are also typically required by the reviewing agency. Misinterpretation of our recommendations or omission of our requirements from the project plans and specifications may result in changes to the project design during the construction phase, with the potential for additional costs and delays in order to bring the project into conformance with the requirements outlined within this report. Services performed for review of the project plans and specifications are considered "post-report" services and billed on a "time and materials" fee basis in accordance with our latest Standard Fee Schedule.

VI. LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. This Geotechnical Investigation was prepared specifically for RRM Design Group and for the specific project and location described in the body of this report. This report and the recommendations included



herein should be utilized for this specific project and location exclusively. This Geotechnical Investigation should not be applied to nor utilized on any other project or project site.

2. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be provided.

3. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field.

4. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural process or the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside of our control. This report should therefore be reviewed in light of future planned construction and then current applicable codes. This report should not be considered valid after a period of two (2) years without our review.

5. This report was prepared upon your request for our services in accordance with currently accepted standards of professional geotechnical engineering practice. No warranty as to the contents of this report is intended, and none shall be inferred from the statements or opinions expressed.

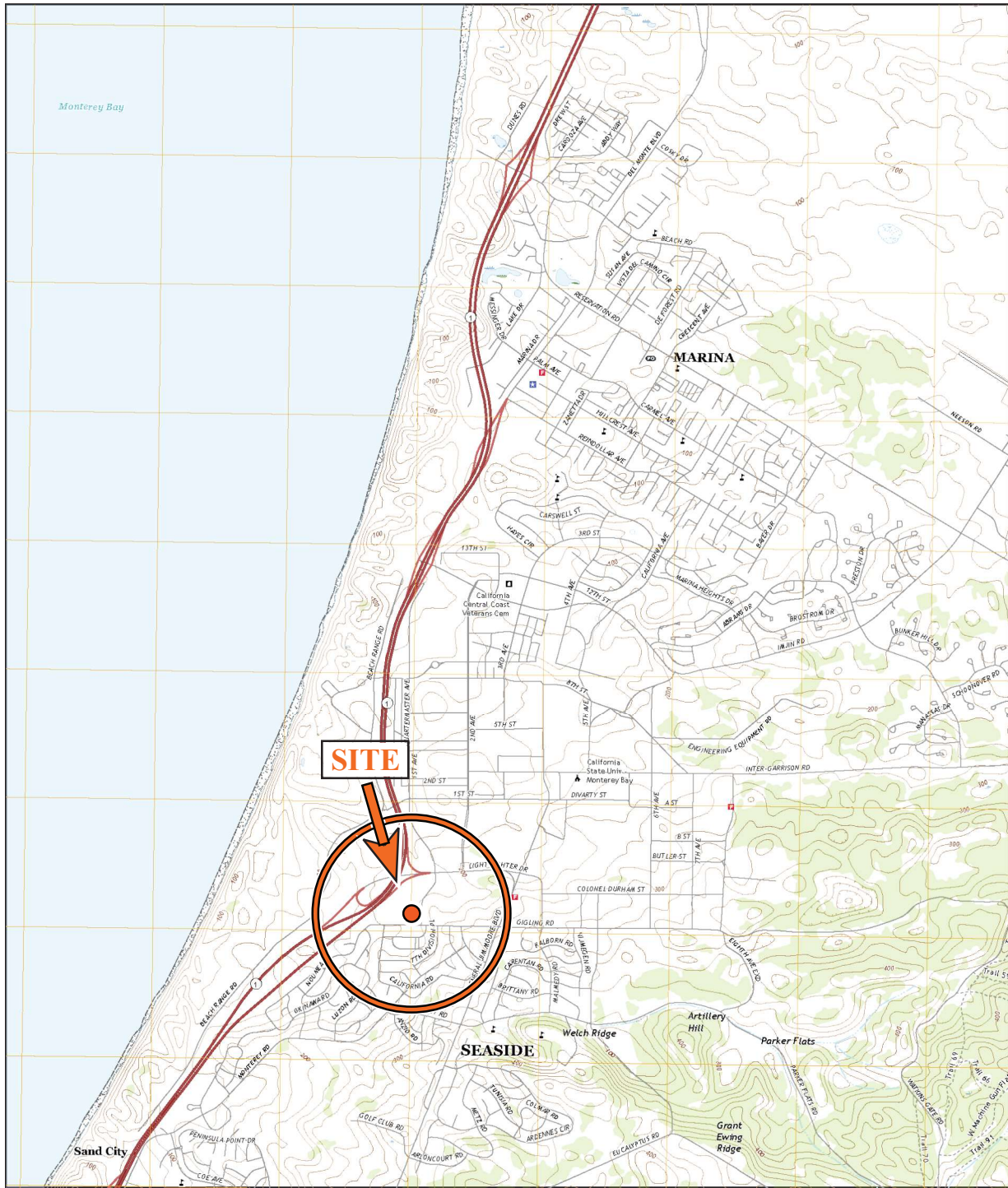
6. The scope of our services mutually agreed upon for this project did not include any environmental assessment or study for the presence of hazardous or toxic materials in the soil, surface water, groundwater, or air, on or below or around this site.



APPENDIX A

Regional Site Map
Site Map Showing Test Borings
Key to Soil Classification
Log of Test Borings
Corrosivity Test Summary
Direct Shear Test Results
R-Value Test Results
Typical Retaining Wall Drain Detail
Surcharge Pressure Diagram





Base Map: © USGS Topographic Maps



Regional Site Map
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 1
 Project No. 2302
 Date: 3/10/23

LEGEND

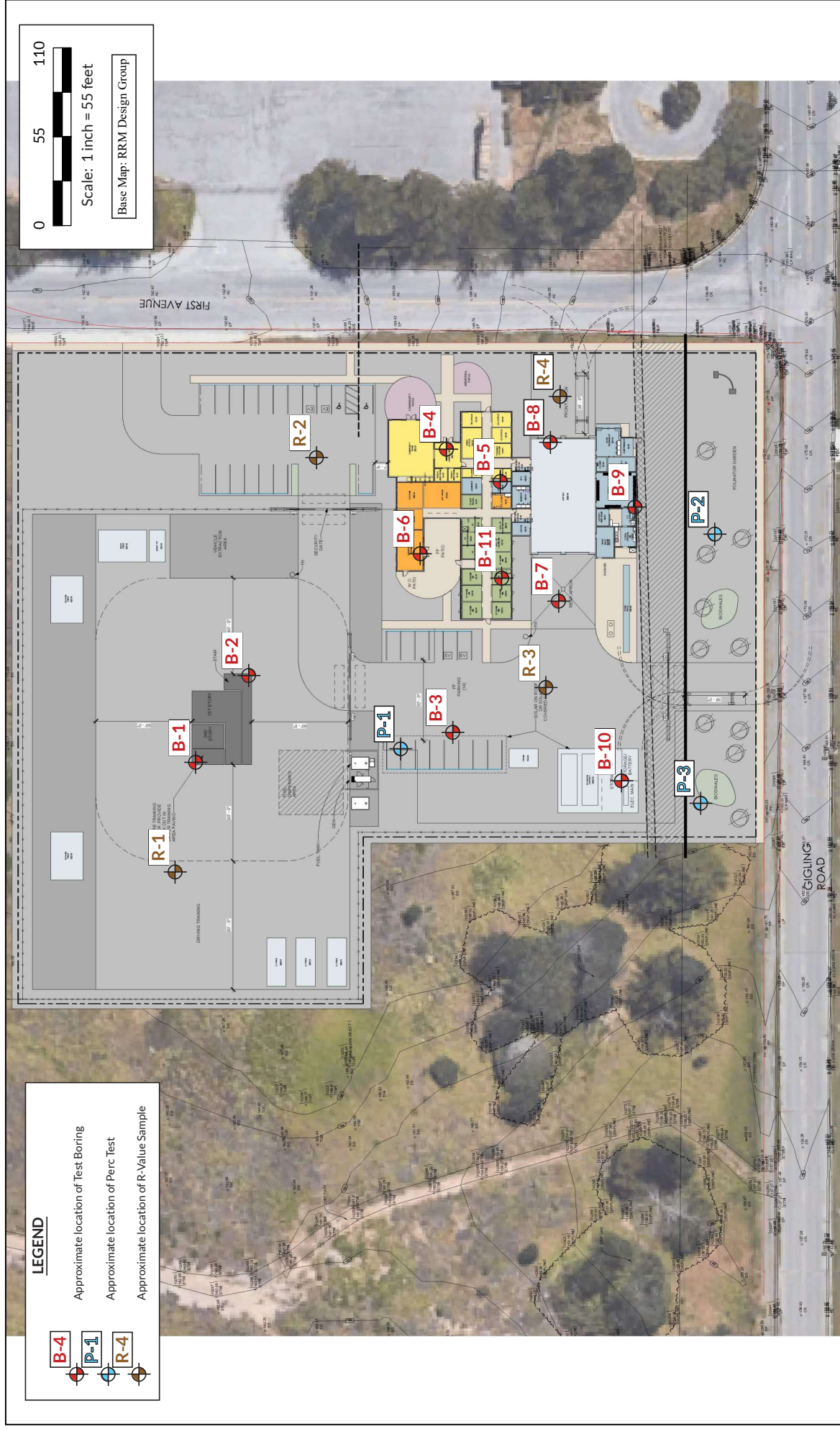


Approximate location of Test Boring

Approximate location of Perc Test

Approximate location of R-Value Sample

0 55 110
 Scale: 1 inch = 55 feet
 Base Map: RRM Design Group



Pacific Crest
 ENGINEERING INC

Site Map Showing Test Borings
 Seaside Fire Station No. 2
 Seaside, California

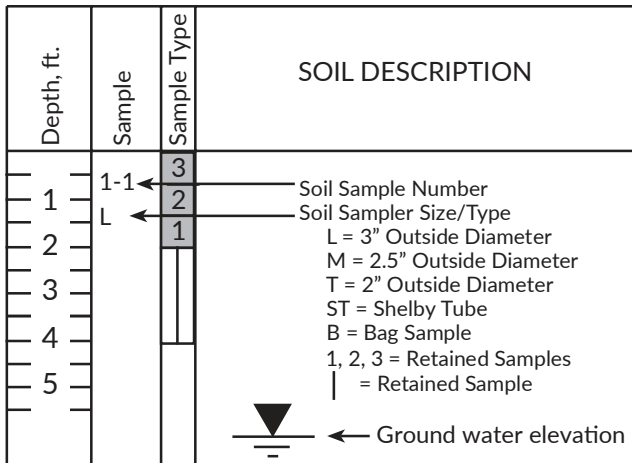
Figure No. 2
 Project No. 2302
 Date: 3/10/23

KEY TO SOIL CLASSIFICATION - FINE GRAINED SOILS (FGS)
UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2487 (Modified)

MAJOR DIVISIONS	SYMBOL	FINES	COARSENESS	SAND/GRAVEL	GROUP NAME		
SILT AND CLAY	CL Lean Clay PI > 7 Plots Above A Line -OR- ML Silt PI > 4 Plots Below A Line *LL < 35% Low Plasticity	<30% plus No. 200	<15% plus No. 200		Lean Clay / Silt		
			15-30% plus No. 200	% sand ≥ % gravel	Lean Clay with Sand / Silt with Sand		
		≥30% plus No. 200		% sand ≥ % gravel	< 15% gravel	Sandy Lean Clay / Sandy Silt	
				% sand < % gravel	≥ 15% gravel	Sandy Lean Clay with Gravel / Sandy Silt with Gravel	
					< 15% sand	Gravelly Lean Clay / Gravelly Silt	
					≥ 15% sand	Gravelly Lean Clay with Sand / Gravelly Silt with Sand	
		CL - ML 4 < PI < 7	<30% plus No. 200	<15% plus No. 200		Silty Clay	
				15-30% plus No. 200	% sand ≥ % gravel	Silty Clay with Sand	
			≥30% plus No. 200		% sand ≥ % gravel	< 15% gravel	Sandy Silty Clay
					% sand < % gravel	≥ 15% gravel	Sandy Silty Clay with Gravel
					< 15% sand	Gravelly Silty Clay	
					≥ 15% sand	Gravelly Silty Clay with Sand	
	35% ≤ *LL < 50% Intermediate Plasticity	CI	<30% plus No. 200	<15% plus No. 200		Clay	
				15-30% plus No. 200	% sand ≥ % gravel	Clay with Sand	
			≥30% plus No. 200		% sand ≥ % gravel	< 15% gravel	Sandy Clay
					% sand < % gravel	≥ 15% gravel	Sandy Clay with Gravel
						< 15% sand	Gravelly Clay
						≥ 15% sand	Gravelly Clay with Sand
	*LL > 50% High Plasticity	CH Fat Clay Plots Above A Line -OR- MH Elastic Silt Plots Below A Line	<30% plus No. 200	<15% plus No. 200		Fat Clay or Elastic Silt	
				15-30% plus No. 200	% sand ≥ % gravel	Fat Clay with Sand	
≥30% plus No. 200				% sand ≥ % gravel	< 15% gravel	Sandy Fat Clay / Sandy Elastic Silt	
				% sand < % gravel	≥ 15% gravel	Sandy Fat Clay with Gravel / Sandy Elastic Silt with Gravel	
				< 15% sand	Gravelly Fat Clay / Gravelly Elastic Silt		
				≥ 15% sand	Gravelly Fat Clay with Sand / Gravelly Elastic Silt with Sand		

* LL = Liquid Limit
 * PI = Plasticity Index

BORING LOG EXPLANATION



MOISTURE

DESCRIPTION	CRITERIA
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp, but no visible water
WET	Visible free water, usually soil is below the water table

CONSISTENCY

DESCRIPTION	UNCONFINED SHEAR STRENGTH (KSF)	STANDARD PENETRATION (BLOWS/FOOT)
VERY SOFT	< 0.25	< 2
SOFT	0.25 - 0.5	2 - 4
FIRM	0.5 - 1.0	5 - 8
STIFF	1.0 - 2.0	9 - 15
VERY STIFF	2.0 - 4.0	16 - 30
HARD	> 4.0	> 30



Boring Log Explanation - FGS
 Seaside Firestation No. 2
 Seaside, California

Figure No. 3
 Project No. 2302
 Date: 3/10/23

KEY TO SOIL CLASSIFICATION - COARSE GRAINED SOILS
UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D2487 (Modified)

MAJOR DIVISIONS		FINES	GRADE/TYPE OF FINES	SYMBOL	GROUP NAME *
GRAVEL	More than 50% of coarse fraction is larger than No. 4 sieve size	<5%	$Cu \geq 4$ and $1 \leq Cc \leq 3$	GW	Well-Graded Gravel / Well-Graded Gravel with Sand
			$Cu < 4$ and/or $1 > Cc > 3$	GP	Poorly Graded Gravel/Poorly Graded Gravel with Sand
		5-12%	ML or MH	GW - GM	Well-Graded Gravel with Silt / Well- Graded Gravel with Silt and Sand
				GP - GM	Poorly Graded Gravel with Silt / Poorly Graded Gravel with Silt and Sand
			CL, CI or CH	GW - GC	Well-Graded Gravel with Clay / Well-Graded Gravel with Clay and Sand
				GP - GC	Poorly Graded Gravel with Clay/ Poorly Graded Gravel with Clay and Sand
		>12%	ML or MH	GM	Silty Gravel / Silty Gravel with Sand
			CL, CI or CH	GC	Clayey Gravel/Clayey Gravel with Sand
			CL - ML	GC - GM	Silty, Clayey Gravel/Silty, Clayey Gravel with Sand
		SAND	50% or more of coarse fraction is smaller than No. 4 sieve size	<5%	$Cu \geq 6$ and $1 \leq Cc \leq 3$
$Cu < 6$ and/or $1 > Cc > 3$	SP				Poorly Graded Sand / Poorly Graded Sand with Gravel
5-12%	ML or MH			SW - SM	Well-Graded Sand with Silt / Well- Graded Sand with Silt and Gravel
				SP - SM	Poorly Graded Sand with Silt / Poorly Graded Sand with Silt and Gravel
	CL, CI or CH			SW - SC	Well-Graded Sand with Clay / Well-Graded Sand with Clay and Gravel
				SP - SC	Poorly Graded Sand with Clay / Poorly Graded Sand with Clay and Gravel
>12%	ML or MH			SM	Silty Sand / Silty Sand with Gravel
	CL, CI or CH			SC	Clayey Sand / Clayey Sand with Gravel
	CL - ML			SC - SM	Silty, Clayey Sand / Silty, Clayey Sand with Gravel

* The term "with sand" refers to materials containing 15% or greater sand particles within a gravel soil, while the term "with gravel" refers to materials containing 15% or greater gravel particles within a sand soil.

US STANDARD SIEVE SIZE:	3 inch	¾ inch	No. 4	No. 10	No. 40	No. 200	0.002 µm
		COARSE	FINE	COARSE	MEDIUM	FINE	
COBBLES AND BOULDERS	GRAVEL		SAND			SILT	CLAY

RELATIVE DENSITY

DESCRIPTION	STANDARD PENETRATION (BLOWS/FOOT)
VERY LOOSE	0 - 4
LOOSE	5 - 10
MEDIUM DENSE	11 - 30
DENSE	31 - 50
VERY DENSE	> 50

MOISTURE

DESCRIPTION	CRITERIA
DRY	Absence of moisture, dusty, dry to the touch
MOIST	Damp, but no visible water
WET	Visible free water, usually soil is below the water table



Boring Log Explanation - CGS
 Seaside Firestation No. 2
 Seaside, California

Figure No. 4
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP

DATE DRILLED 1/17/23

BORING DIAMETER 8" HS

BORING NO. B1

DRILL RIG Britton - Track mounted CME 55

HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	1-1	2	SILTY SAND: Brown (7.5YR 4/3), fine to very fine grained, poorly graded, rootlets throughout, moist, loose Decrease in rootlets, moist, loose	SM	3	6		8.9	101.4			
2	L	1			5							
3	1-2	T			6							
4					2							
5	1-3	2	SAND WITH SILT: Yellowish brown (10YR 5/8), medium grained to fine grained, poorly graded, moist, loose	SP -SM	3	9		15.7	102.8			
6	L	1			5							
7					7							
8					10							
9												
10	1-4	2	Very pale brown (10YR 8/4), medium to fine grained, poorly graded, scattered mica flakes throughout, dry to damp, medium dense		3	13		3.4	96.3			
11	L	1			10							
12					14							
13												
14												
15	1-5		Very fine to fine grained, poorly graded, dry to damp, medium dense		5	26		3.1		5.6		
16	T				10							
17					16							
18												
19												
20	1-6	2	SAND: Brownish yellow (10YR 6/6), medium to fine grained, poorly graded, dry to damp, medium dense	SP	8	20		2.6	103.7			
21	L	1			17							
22					21							
23												



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 5
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/17/23 BORING DIAMETER 8" HS BORING NO. B1

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
24			SAND: Brownish yellow (10YR 6/6), medium to fine grained, poorly graded, dry to damp, medium dense	SP								
25	1-7	T	Slight increase in mica flakes, slightly damp, dense		9							
26					15							
27					22	37		2.9		3.9		
30	1-8	T	Less mica flakes, damp to dry, dense		7							
31					11							
32					20	31		3.1		2.7		
35	1-9	L	Yellow (10YR 7/6), medium to fine grained, some very fine grains, trace mica, poorly graded, damp, dense		15							
36		2	(driller added water)		27							
37		1			40	35		3.8	94.0			
40	1-10	T	Damp to moist, dense (driller added water)		11							
41					15							
42					24	39		3.5		2.7		
45	1-11	L	Moist, medium dense		13							
46		2			25							
		1			34	30		4.3	93.8			



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 6
Project No. 2302
Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/17/23 BORING DIAMETER 8" HS BORING NO. B1

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
			SAND: Yellow (10YR 7/6), medium to fine grained, some very fine grains, trace mica, poorly graded, moist (driller added water)	SP								
1-12	T		Slight increase in mica flakes, slightly damp, dense		13 19 28	47		4.3		3.6		
			Boring terminated at 51½ feet. No groundwater encountered.									



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 7
Project No. 2302
Date: 3/10/23

LOGGED BY JP

DATE DRILLED 1/17/23

BORING DIAMETER 8" HS

BORING NO. B2

DRILL RIG Britton - Track mounted CME 55

HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	2-1	L	SILTY SAND: Dark brown (7.5YR 3/3), fine to very fine grained, poorly graded, rootlets throughout, moist, loose	SM	2							
2		5										
2	2-2	L	Trace rootlets, moist, loose		5	5		9.4	104.7			
3		1										
3	2-2	T			2							
4		2										
4					2	4		13.5				
5												
5	2-3	L	Reddish yellow (7.5YR 6/8) at 5½ feet, medium to fine grained, poorly graded, moist, medium dense (driller added water)		3							
6		2										
6		L			12			12.4	106.3			
7		1										
7					29	22						
8												
8												
9												
9			SAND: Very pale brown (10YR 8/4), medium to fine grained, poorly graded, dry, loose	SP								
10	2-4	L										
10		L			4							
11		2										
11		L			9			3.1	86.3	3.4		
12		1										
12					11	10						
13												
13												
14												
14			Medium to fine grained, poorly graded, clean sand, dry, medium dense									
15	2-5	L										
15		L			4							
16		2										
16		T			8							
17		1										
17					14	22		1.9				
18												
18												
19												
19			Dry, medium dense									
20	2-6	L										
20		L			12							
21		2										
21		L			22							
22		1										
22			Boring terminated at 21½ feet. No groundwater encountered.		26	25		2.0	82.2			
23												



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 8
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/17/23 BORING DIAMETER 8" HS BORING NO. B3

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	3-1	L	SILTY SAND: Dark brown (7.5YR 3/3), fine to very fine grained, poorly graded, rootlets throughout, moist, loose	SM	2							
2		1										
2	3-2	T	Less rootlets, moist, loose		1	1		9.4	104.7			
3					2							
4					2	4		11.0				
5	3-3	L	Reddish yellow (7.5YR 6/8), medium to fine grained, poorly graded, moist, loose		3							
6					5							
7					7	7		14.4	101.1			
8												
9												
10	3-4	T	SAND: Yellow (10YR 7/6), medium to fine grained, poorly graded, dry, medium dense	SP	4							
11					7							
12					8	15		2.7		3.5		
13												
14												
15	3-5	L	Dry, medium dense		6							
16					10							
17					16	14		1.7	88.3			
17			Boring terminated at 16½ feet. No groundwater encountered.									
18												
19												
20												
21												
22												
23												



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 9
Project No. 2302
Date: 3/10/23

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	4-1	2	SILTY SAND: Black (7.5YR 2.5/1) and very dark brown (7.5YR 2.5/2), fine to very fine grained, poorly graded, abundant rootlets, moist, very loose	SM	1							
2	L	1			2							
3	4-2	1			Moist, loose	2	2		9.9	94.7		
4	T				1							
5					2							
6	4-3	2	Strong brown (7.5YR 4/6), medium to fine grained, poorly graded, silt exhibits low plasticity, moist, loose		3	5		11.2				
7	L	1			4							
8					5							
9					9	7		12.4	105.6			
10	4-4	2	SAND: Yellow (10YR 7/6), medium to fine grained, poorly graded, damp to dry, loose	SP	3							
11	L	1			6							
12					12	9		2.5	82.7	2.2		
13												
14												
15	4-5		Damp to dry, medium dense		4							
16	T				8							
17					8	16		2.8				
18												
19												
20	4-6	2	Dry, medium dense		7							
21	L	1			13							
22					20	17		3.2	96.6			
23			Boring terminated at 21½ feet. No groundwater encountered.									



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 10
Project No. 2302
Date: 3/10/23

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	5-1	L	SILTY SAND: Dark brown (7.5YR 3/4), fine to very fine grained poorly graded, rootlets throughout, moist, very loose	SM	1							
2		2										
3	5-2	T	Brown, medium to fine grained, poorly graded, moist, very loose		1	1	11.8	94.2				
4					2							
5	5-3	L	Silt exhibits intermediate plasticity, wet, loose		2							
6					3							
7	5-4	T	Wet, loose		4	5	11.8	105.2	19.3			
8					4							
9					6	10	13.7		16.0			
10	5-5	L	SAND: Brownish yellow, medium to fine grained, poorly graded, moist, medium dense	SP	4							
11					11							
12					14	13	2.4	96.9				
13												
14												
15	5-6	T	Very pale brown with brownish yellow, medium to fine grained, poorly graded, slightly damp, medium dense		4							
16					6							
17					8	14	3.0					
18												
19												
20	5-7	L	Yellow (10YR 8/6), medium to fine grained, poorly graded, slightly damp to dry, medium dense		7							
21					15							
22					19	18	2.9	91.6				
23												



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 11
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/18/23 BORING DIAMETER 8" HS BORING NO. B5

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
24			SAND: Yellow (10YR 8/6), medium to fine grained, poorly graded, slightly damp to dry, medium dense	SP								
25	5-8		Dry, medium dense		11							
26	L	2			19							
26		1			30	21		2.3	91.5	3.2		
27			Boring terminated at 26½ feet. No groundwater encountered.									
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 12
 Project No. 2302
 Date: 3/10/23

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	6-1 L	2 1	SAND WITH SILT: Dark brown (7.5YR 3/3), fine to very fine grained, poorly graded, rootlets throughout, moist, loose	SP-SM	4							
2					4							
3	6-2 T	1	Brown (7.5YR 4/4), some rootlets, moist, loose		5	5		9.5	101.7			
4					1							
5	6-3 L	2 1	Brownish yellow (10YR 6/6), medium to very fine grained, poorly graded, moist, loose		1							
6					2							
7					3							
10	6-4 L	2 1	SAND: Yellow (10YR 7/8), medium to fine grained, poorly graded, dry, medium dense	SP	6							
11					9							
12					12							
15	6-5 T	1	Very pale brown (10YR 7/4), medium to fine grained, poorly graded, dry, medium dense		6							
16					12							
17					16							
20	6-6 L	2 1	Coarse to very fine grained, poorly graded, damp to dry, medium dense		10			2.7	98.3	1.9		
21					22							
22					26							
23												



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 13
Project No. 2302
Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/17/23 BORING DIAMETER 8" HS BORING NO. B6

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
24			SAND: Very pale brown (10YR 7/4), medium to fine grained, poorly graded, damp to dry, medium dense	SP								
25	6-7 L		Yellow (10YR 7/6), medium to fine grained, poorly graded, damp to dry, medium dense		8	22		2.7	97.1			
26		17										
26		24										
27			Boring terminated at 26½ feet. No groundwater encountered.									
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 14
Project No. 2302
Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/18/23 BORING DIAMETER 8" HS BORING NO. B7

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
7-1	L	2 1	SILTY SAND: Brown (7.5YR 4/2), fine to very fine grained, poorly graded, rootlets throughout, moist, very loose	SM	1							
					1							
7-2	T		Brown (7.5YR 5/4), medium to fine grained, poorly graded, dry, very loose		1	1		10.4	96.0			
					1							
7-3	L	2 1	Lack of rootlets, moist, loose		2							
					5				12.4	104.4	16.7	
					5	5						
7-4	T		SAND: Yellow (10YR 7/6), medium to fine grained, poorly graded, dry, medium dense	SP	7							
					13							
					13	26		2.7				
7-5	L		No sample recovered, medium dense		9							
					21							
					24	23						
7-6	L		Dry, medium dense		14							
					25							
					31	29		1.3	97.4			
7-7	T	1	Dry, medium dense		7							
					15							
					23	38		1.3				
Boring terminated at 23 feet. No groundwater.												



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 15
Project No. 2302
Date: 3/10/23

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	8-1	L	SILTY SAND: Dark brown (7.5YR 3/4), fine to very fine grained, poorly graded, rootlets throughout, moist, very loose	SM	1							
2		2							10.8	95.1		
3	8-2	T	Brown (7.5YR 4/4), some rootlets, moist, very loose		1	2						
4					1				10.1			
5	8-3	L	Slightly less silt, silt exhibits low plasticity, some rootlets, moist, very loose		1							
6					2				12.2	100.3	15.6	
7	8-4	T	SAND: Brownish yellow (10YR 6/6), medium to fine grained, poorly graded, slightly damp to dry, medium dense	SP	6	4						
8					9				4.1			
10	8-5	L	Yellowish brown (10YR 5/8), slightly damp to dry, medium dense		14							
11					19				2.5	97.2		
15	8-6	T	Very pale brown (10YR 7/4), dry, medium dense		5							
16					10				1.4			
17					13	26						
20	8-7	L	Slightly moist, medium dense		7							
21					15				1.6	96.0		
22			Boring terminated at 21½ feet. No groundwater encountered.									
23					36	26						

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	9-1	L	SILTY SAND: Dark brown (7.5YR 3/3), fine to very fine grained, poorly graded, wood pieces, rootlets throughout, moist, very loose	SM	1							
2		1										
3	9-2	T	Decrease in rootlets, moist, very loose		2	1		10.6	97.7			
4					1							
5	9-3	L	Brown, moist to wet, very loose		1							
6					3							
7	9-4	T	Very pale brown (10YR 8/3), sand is medium to fine grained and poorly graded, dry, medium dense		5	4		3.6	95.6	17.2		
8					8							
9					12							
10	9-5	L	SAND: Yellowish brown (10YR 5/8), grades to yellow (10YR 7/6), medium to very fine grained, trace coarse grains, poorly graded, dry, medium dense	SP	15	27		3.1		15.5		
11					16							
12					26							
13					31	19		3.6	100.7			
14												
15	9-6	T	Very pale brown (10YR 7/4), medium to fine grained, poorly graded, dry, medium dense		4							
16					7							
17					9	16		1.5				
18												
19												
20	9-7	L	Dry, medium dense		10							
21					21							
22					30	26		1.5	93.4	2.7		
23												



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 17
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/18/23 BORING DIAMETER 8" HS BORING NO. B9

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
			SAND: Very pale brown (10YR 7/4), medium to fine grained, poorly graded, dry, medium dense	SP								
25	9-8 T		Dry, dense		6 13 21	33		1.4				
			Boring terminated at 26½ feet. No groundwater encountered.									
30												
35												
40												
45												



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 18
Project No. 2302
Date: 3/10/23

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	10-1	L	SILTY SAND: Brown (7.5YR 4/3), fine to very fine grained, poorly graded, trace rootlets throughout, moist, very loose	SM	1							
2		1			2							
3	10-2	T	SAND: Yellowish brown (10YR 5/6), medium to fine grained, poorly graded, trace rootlets throughout, moist, very loose	SP	1	1		8.5				
4					1	1						
5	10-3	L	Lack of rootlets, moist, loose		2							
6					5							
7					6	6		13.1	104.9			
8												
9												
10	10-4	L	Yellow (10YR 7/6), dry, medium dense		8							
11					14							
12					16	16		2.6	97.3	3.0		
13												
14												
15	10-5	T	Dry, medium dense		5							
16					7							
17					9	16		3.2				
18												
19												
20	10-6	L	Dry, medium dense		7							
21					17							
22					17	18		2.8	96.6			
23			Boring terminated at 21½ feet. No groundwater encountered.									



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 19
Project No. 2302
Date: 3/10/23

LOGGED BY JP

DATE DRILLED 1/18/23

BORING DIAMETER 8" HS

BORING NO. B11

DRILL RIG Britton - Track mounted CME 55

HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	11-1	L	SILTY SAND: Dark yellowish brown (10YR 3/4), fine to very fine grained, poorly graded, rootlets throughout, moist, loose	SM	2							
2	2				6							
3	1	11-2			Moist, loose	7	7	8.3	104.9			
4					2							
5					3							
6					3	6	11.9					
7	11-3	L	Yellowish brown (10YR 5/8), moist, loose		4							
8	2				7							
9	1				9	8	12.5	105.0	12.7			
10	11-4	L	SAND: Very pale brown (10YR 7/4), medium to fine grained, poorly graded, dry, medium dense	SP	6							
11	2				11							
12	1				16	14	1.5	94.8				
13												
14												
15	11-5	T	Slightly damp to dry, medium dense		5							
16					7							
17					9	16	1.5					
18												
19												
20	11-6	L	Yellow (10YR 7/6), medium to fine grained, poorly graded, damp to dry, medium dense		7							
21	2				11							
22	1				18	21	1.8	88.3	2.9			
23			Boring terminated at 21½ feet. No groundwater encountered.									



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 20
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/17/23 BORING DIAMETER 8" HS BORING NO. P1

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
1	P1-1 L	2	SILTY SAND: Dark brown (7.5YR 3/3), fine to very fine grained, poorly graded, trace rootlets throughout, moist, loose	SM	2							
2		4										
3	P1-2 T	1	Moist, loose		4	4		9.4	100.5			
4		2			2			12.3				
5	P1-3 L	2	SAND: Yellowish brown (10YR 5/4), medium to fine grained, poorly graded, slightly damp to dry, medium dense	SP	3							
6		7										
7		20			14							
8			Boring terminated at 7 feet. No groundwater encountered.									
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 21
Project No. 2302
Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/18/23 BORING DIAMETER 8" HS BORING NO. P2

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results
	P2-1 B		SILTY SAND: Dark brown (7.5YR 3/4), fine to very fine grained, poorly graded, trace rootlets throughout, moist	SM				10.2				
	P2-2 B		Moist					10.0				
	P2-3 B		Moist					9.3		16.0		
			Boring terminated at 5 feet. No groundwater encountered.									



Log of Test Borings
 Seaside Fire Station No. 2
 Seaside, California

Figure No. 22
 Project No. 2302
 Date: 3/10/23

LOGGED BY JP DATE DRILLED 1/18/23 BORING DIAMETER 8" HS BORING NO. P3

DRILL RIG Britton - Track mounted CME 55 HAMMER TYPE Auto-trip

Depth (feet)	Sample	Sample Type	Soil Description	USCS	Field Blow Counts	SPT "N60" Value	Pocket Pen. (tsf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200	Plasticity Index	Additional Lab Results	
1	P3-1 B		SILTY SAND: Dark brown (7.5YR 3/3), fine to very fine grained, poorly graded, trace rootlets throughout, moist	SM				10.4					
2													
3	P3-2 B		SAND: Brown (7.5YR 4/3), medium to fine grained, poorly graded, moist to wet	SP									
4													
5									13.7		19.1		
6													
7			Boring terminated at 6 feet. No groundwater encountered.										
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													



Log of Test Borings
Seaside Fire Station No. 2
Seaside, California

Figure No. 23
Project No. 2302
Date: 3/10/23



Corrosivity Test Summary

CTL #	416-694	Date:	2/3/2023	Tested By:	PJ	Checked:	PJ
Client:	Pacific Crest Engineering	Project:	Seaside firestation #2			Proj. No.:	2302
Remarks:							

Boring	Sample No.	Depth, ft.	As Rec.	Resistivity @ 15.5 °C (Ohm-cm)		Chloride mg/kg Dry Wt. Cal 422-mod. Cal 417-mod.	Sulfate		pH	ORP (Redox) mv SM 2580B ASTM D2216	Moisture At Test % ASTM D2216	Soil Visual Description
				Minimum	Saturated		mg/kg Dry Wt. Cal 417-mod.	% Dry Wt. Cal 417-mod.				
-	2-3-1	-	-	ASTM G57 Cal 643	ASTM G57 Cal 643	4	13	0.0013	6.9	-	7.2	Yellowish Red Clayey SAND

Chloride Concentration	mg/kg
Severe	>1,500
Positive	300-1,500
Negligible	0-300

Resistivity	Ohm-cm
Very Corrosive	0-1000
Corrosive	1,000-2,000
Fairly Corrosive	2,000-5,000
Mildly Corrosive	5,000-10,000
Negligible	>10,000

Sulfate Concentration	mg/kg
Severe	>5,000
Considerable	2,000-5,000
Positive	1,000-2,000
Negligible	0-1,000

pH	
Potential for acid attack on concrete and steel	<5.5





Corrosivity Test Summary

CTL #	416-693	Date:	2/9/2023	Tested By:	PJ	Checked:	PJ
Client:	Pacific Crest Engineering	Project:	Seaside firestation #2			Proj. No.:	2302

Boring	Sample Location or ID	Resistivity @ 15.5 °C (Ohm-cm)		Chloride mg/kg Dry Wt.	Sulfate mg/kg Dry Wt.	pH	ORP (Redox) mv	Moisture At Test %	Soil Visual Description
		As Rec.	Saturated						
-	8-1-1	ASTM G57 Cal 643	ASTM G57 Cal 417-mod Cal 417-mod	Cal 422-mod. Cal 417-mod	Cal 417-mod Cal 417-mod	Cal 643	SM 2580B	ASTM D2216	Brown SAND w / Silt, trace organics

Resistivity	Ohm-cm
Very Corrosive	0-1000
Corrosive	1,000-2,000
Fairly Corrosive	2,000-5,000
Mildly Corrosive	5,000-10,000
Negligible	>10,000

Chloride Concentration	mg/kg
Severe	>1,500
Positive	300-1,500
Negligible	0-300

Sulfate Concentration	mg/kg
Severe	>5,000
Considerable	2,000-5,000
Positive	1,000-2,000
Negligible	0-1,000

pH	
Potential for acid attack on concrete and steel	<5.5

Remarks:

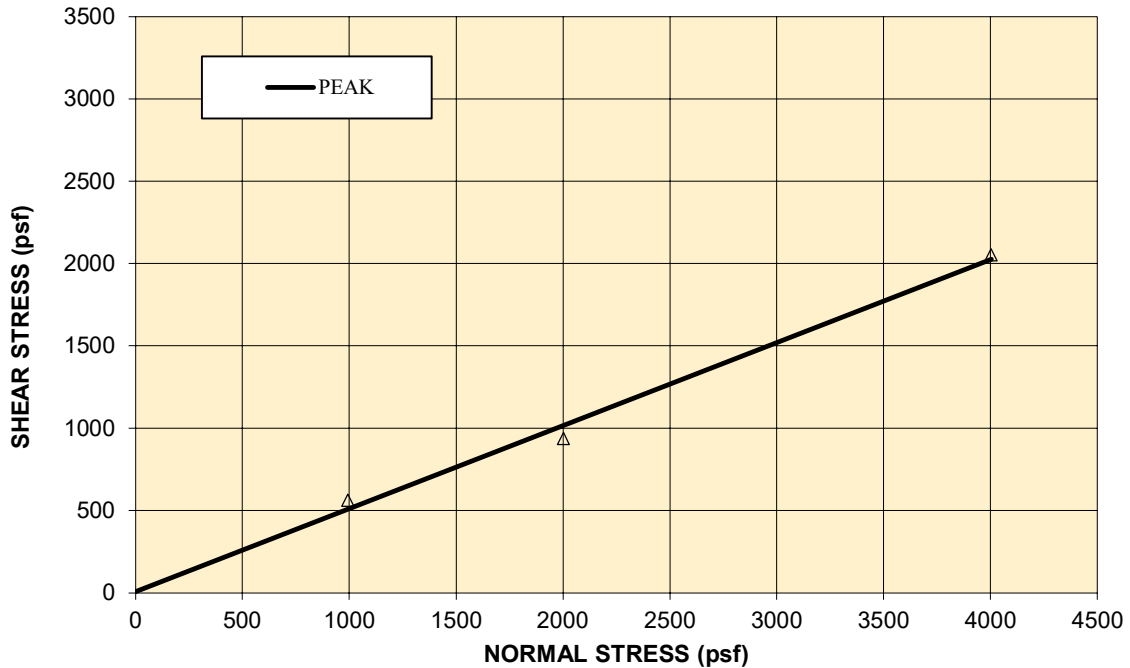
Figure No. 25
Project No. 2203
Date: 3/10/22

Corrosivity Test Summary
Seaside Fire Station No. 2
Seaside, California



DIRECT SHEAR TEST - ASTM D3080

Direct Shear Test for Soils Under Consolidated Drained Conditions



SAMPLE:	7-1-1	USCS:	SM
SOIL TYPE:	SILTY SAND		

	ϕ	C (psf)
PEAK	27	0

Initial Sample Data:

Sample:	A	B	C
Sample Diameter (in):	2.42	2.42	2.42
Initial Sample Height (in):	1.000	1.000	1.000
Wet Density (pcf):	108.6	101.0	105.5
Moisture (%):	10.4%	10.4%	10.4%
Dry Density (pcf):	98.4	91.5	95.6
Void Ratio:	0.71	0.84	0.76
% Saturation:	39.4%	33.4%	36.8%

Sample Data At Test:

Normal Stress (psf):	994	2002	4003
Sample Height at Test (in):	0.961	0.917	0.902
Wet Density (pcf):	121.7	123.9	128.7
Moisture (%):	21.5%	25.5%	24.3%
Dry Density (pcf):	100.2	98.7	103.5
Void Ratio:	0.69	0.71	0.63
% Saturation:	85.0%	97.2%	104.3%
Strain Rate (in/min):	0.0020	0.0020	0.0020
Peak Shear Stress (psf):	562	936	2052



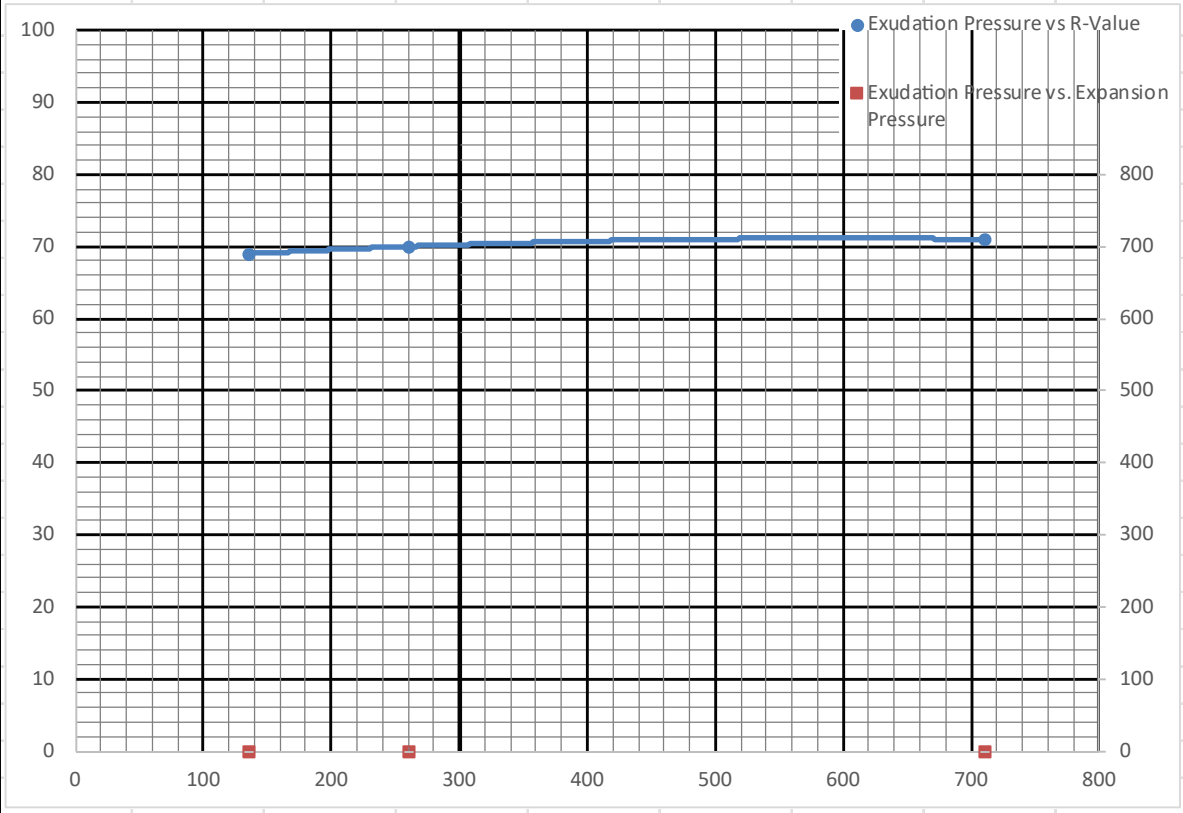
Direct Shear Test Results
Seaside Fire Station No. 2
Seaside, California

Figure No. 26
Project No. 2302
Date: 3/10/22



R-Value CTM 301

CTL Job No.:	416-695	Boring:	R-1	Reduced By:	RU
Client:	Pacific Crest Engineering	Sample:		Checked By:	PJ
Project Number:	2302	Depth:		Date:	2/17/2023
Project Name:	Seaside Firestation #2			R-Value	70
Soil Description:	Dark Brown Silty SAND			Expansion Pressure	0
Remarks:					
Specimen Designation	A	B	C	D	E
Compactor Foot Pressure (psi)	350	50	100		
Exudation Pressure (psi)	711	136	260		
Exudation Load (lbf)	8935	1709	3267		
Height After Compaction (in)	2.33	2.38	2.25		
Expansion Pressure (psf)	0	0	0		
Stabilometer @ 2000	28	28	27		
Turns Displacement	4.24	4.84	4.24		
R-value	74	71	74		
Corrected R-Value	71	69	70		
Moisture Content (%)	11.8	14.1	12.8		
Wet Density (pcf)	122.0	119.1	124.8		
Dry Density (pcf)	109.1	104.3	110.6		



R-Value Test Results
Seaside Fire Station No. 2
Seaside, California

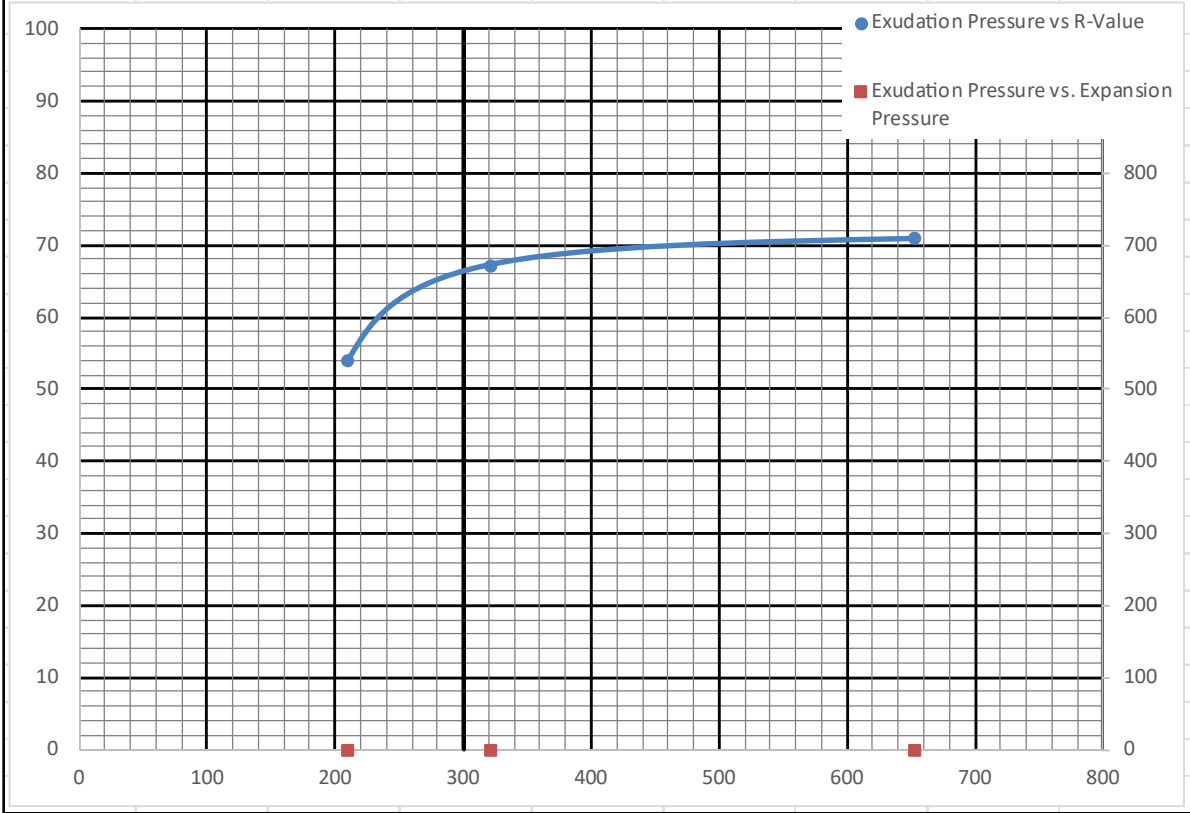
Figure No. 27
Project No. 2203
Date: 3/10/23



R-Value CTM 301

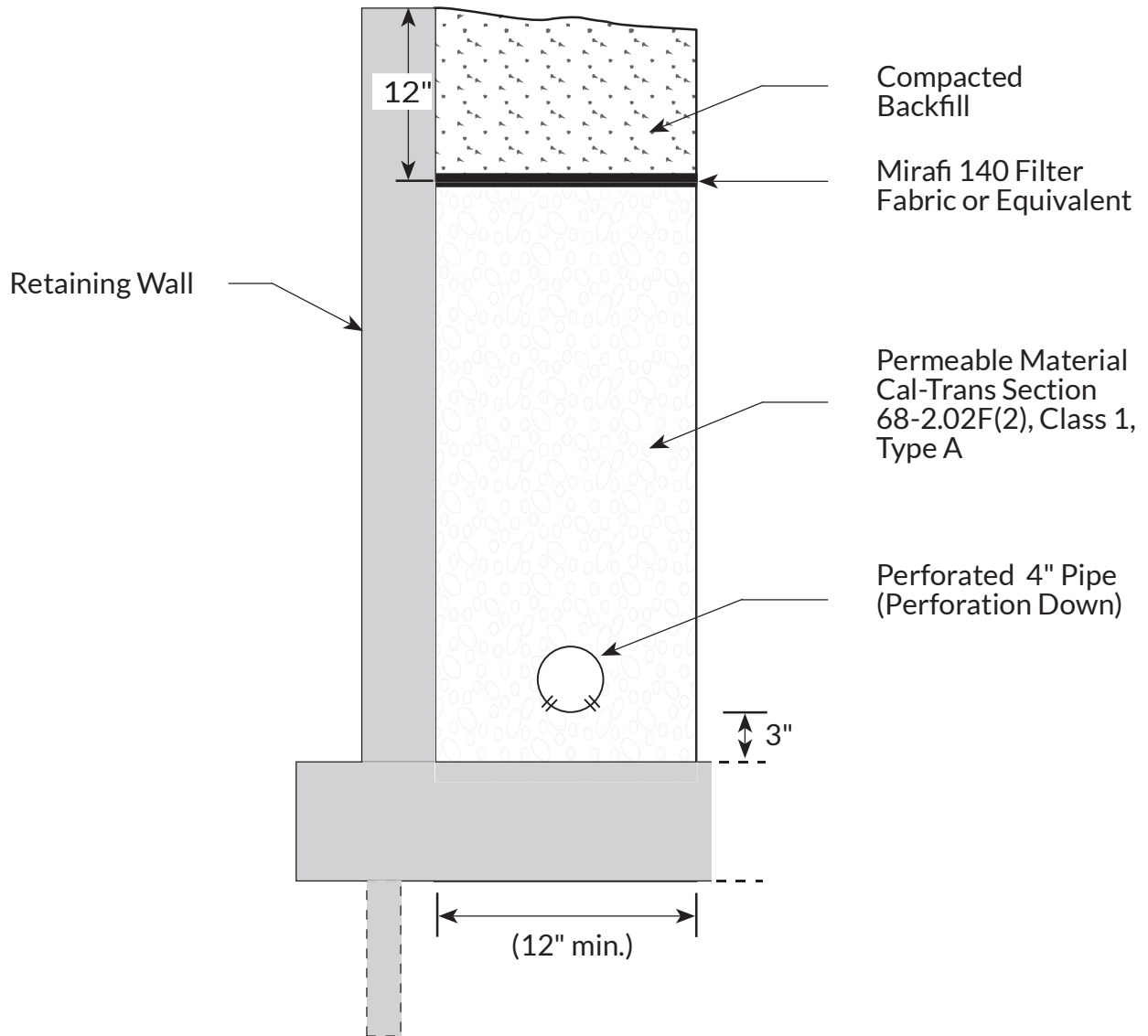
CTL Job No.:	416-696	Boring:		Reduced By:	RU
Client:	Pacific Crest Engineering Inc.	Sample:	2	Checked By:	PJ
Project Number:	2302	Depth:		Date:	2/21/2023
Project Name:	Seaside Firestation #2			R-Value	66
Soil Description:	Dark Brown Silty SAND			Expansion Pressure	0
Remarks:					

Specimen Designation	A	B	C	D	E
Compactor Foot Pressure (psi)	200	50	350		
Exudation Pressure (psi)	321	210	653		
Exudation Load (lbf)	4034	2639	8206		
Height After Compaction (in)	2.34	2.40	2.40		
Expansion Pressure (psf)	0	0	0		
Stabilometer @ 2000	30	46	28		
Turns Displacement	4.54	4.78	4.38		
R-value	70	56	73		
Corrected R-Value	67	54	71		
Moisture Content (%)	10.3	12.3	9.1		
Wet Density (pcf)	127.9	129.3	125.8		
Dry Density (pcf)	116.0	115.2	115.3		



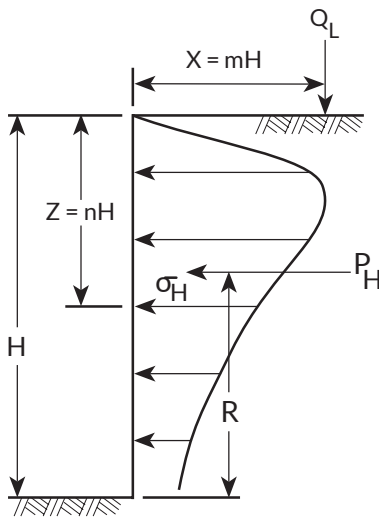
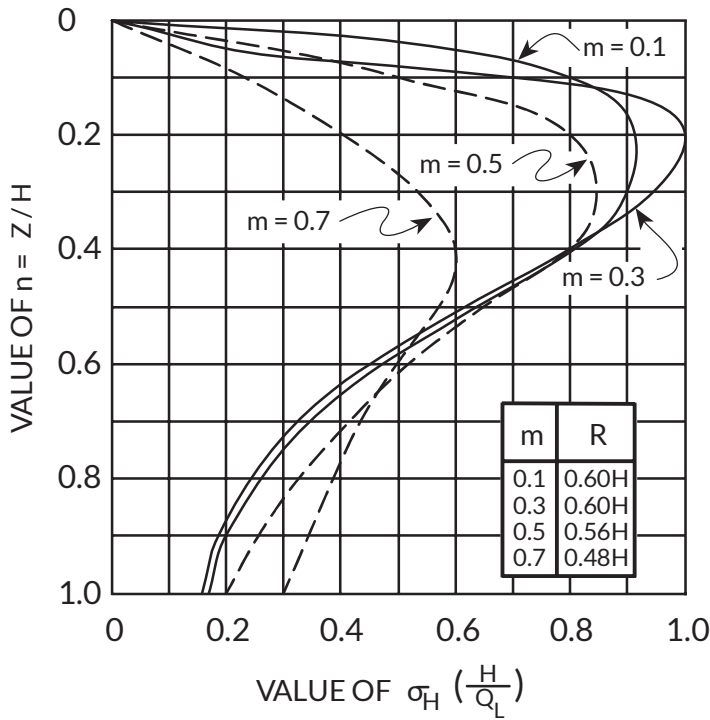
R-Value Test Results
Seaside Fire Station No. 2
Seaside, California

Figure No. 28
Project No. 2203
Date: 3/10/23



Not to Scale

LINE LOAD



FOR $m \leq 0.4$:

$$\sigma_H \left(\frac{H}{Q_L} \right) = \frac{0.20n}{(0.16+n^2)^2}$$

$$P_H = 0.55Q_L$$

FOR $m > 0.4$:

$$\sigma_H \left(\frac{H}{Q_L} \right) = \frac{1.28m^2n}{(m^2+n^2)^2}$$

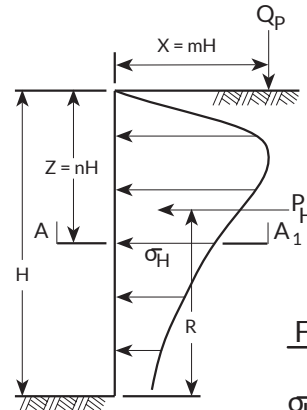
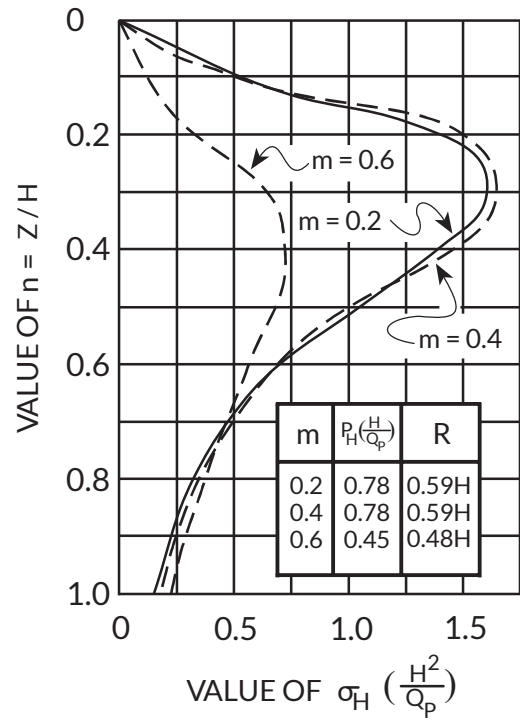
$$\text{RESULTANT } P_H = \frac{0.64Q_L}{(m^2+1)}$$

PRESSURES FROM LINE LOAD Q_L

(BOUSSINESQ EQUATION MODIFIED BY EXPERMENT)

REFERENCE: Design Manual
NAVFAC DM-7.02
Figure 11
Page 7.2-74

POINT LOAD



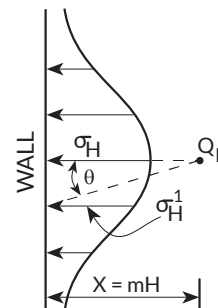
FOR $m \leq 0.4$:

$$\sigma_H \left(\frac{H^2}{Q_P} \right) = \frac{0.28n^2}{(0.16+n^2)^3}$$

FOR $m > 0.4$:

$$\sigma_H \left(\frac{H^2}{Q_P} \right) = \frac{1.77m^2n^2}{(m^2+n^2)^3}$$

$$\sigma_H^1 = \sigma_H \cos^2(1.1q)$$



SECTION A-A₁

PRESSURES FROM POINT LOAD Q_P

(BOUSSINESQ EQUATION MODIFIED)

APPENDIX B

Infiltration Test Results



SHALLOW QUICK INFILTRMETER TEST
Native Soil Assessment for Small Infiltration Based Stormwater Control Measures

Test Information							
Test No.:	P-1	Test Date:	2/1/2023	Test By:	JP	Job No.:	2302
Location of Test:	P-1, NW area of site near proposed training tower						
Soil Information							
% Gravel	0.0	% Sand	85.6	% Silt	14.4	% Clay	-
USCS Description:	Silty Sand			USCS Classification:	SM		
Test Configuration & Constants							
Existing Surface Elevation (ft.)	170.0		Boring Depth from Top of Pipe (ft.)	7.6			
Bioswale Invert Elevation (ft.)	-		Diameter of Perforated Pipe (in.)	3.75			
Bottom of Boring Elevation (ft.)	163.4		Diameter of Test Boring (in.)	8.0			
Boring Depth (ft.)	6.6		Cross-Section Area of Boring (in ²)	50.2			
Constant Head Infiltration Data							
Interval		Actual Time (hr:min)	Interval Time (min)	Water Head (in)	Initial Fill Volume (in ³)	Final Fill Volume (in ³)	Infiltration Volume (in ³)
0	Start	12:36 PM	30	24.0	254.1	981.8	2.2
	End	1:06 PM					
Infiltration Data							
Interval		Actual Time (hr:min)	Interval Time (min)	Flow Readings		Infiltration Volume (in ³)	Infiltration Rate (in/hr)
				Water Elev. (in)	Change in Elev (in)		
1	Start	1:06 PM	10.00	24.00	1.75	14.0	0.84
	End	1:16 PM		22.25			
	Start	1:16 PM	10.00	22.25	2.00	16.0	1.03
	End	1:26 PM		20.25			
	Start	1:26 PM	10.00	20.25	2.00	16.0	1.13
	End	1:37 PM		18.25			
	Start	1:37 PM	15.00	18.25	1.75	14.0	0.72
	End	1:52 PM		16.50			
	Start	1:52 PM	15.00	16.50	1.75	14.0	0.79
	End	2:07 PM		14.75			
	Start	2:07 PM	30.00	14.75	3.25	26.0	0.86
	End	2:37 PM		11.50			
Start	2:37 PM	30.00	11.50	2.25	18.0	0.73	
End	3:07 PM		9.25				
Test Results							
Infiltration Rate, I _t (in/hr):			0.8	Factored Infiltration Rate, K _m (in/hr):			0.4

SHALLOW QUICK INFILTRMETER TEST
Native Soil Assessment for Small Infiltration Based Stormwater Control Measures

Test Information							
Test No.:	P-2	Test Date:	2/2/2023	Test By:	JP	Job No.:	2302
Location of Test:	P-2, South-center area of site near proposed bioswale						
Soil Information							
% Gravel	0.0	% Sand	84.0	% Silt	16.0	% Clay	-
USCS Description:	Silty Sand			USCS Classification:	SM		
Test Configuration & Constants							
Existing Surface Elevation (ft.)	173.0		Boring Depth from Top of Pipe (ft.)	6.92			
Bioswale Invert Elevation (ft.)	-		Diameter of Perforated Pipe (in.)	3.75			
Bottom of Boring Elevation (ft.)	167.3		Diameter of Test Boring (in.)	8.0			
Boring Depth (ft.)	5.8		Cross-Section Area of Boring (in ²)	50.2			
Constant Head Infiltration Data							
Interval		Actual Time (hr:min)	Interval Time (min)	Water Head (in)	Initial Fill Volume (in ³)	Final Fill Volume (in ³)	Infiltration Volume (in ³)
0	Start	8:50 AM	30	24.0	288.8	1443.8	3.5
	End	9:20 AM					
Infiltration Data							
Interval		Actual Time (hr:min)	Interval Time (min)	Flow Readings		Infiltration Volume (in ³)	Infiltration Rate (in/hr)
				Water Elev. (in)	Change in Elev (in)		
1	Start	9:20 AM	10.00	24.00	5.75	46.0	2.98
	End	9:30 AM		18.25			
	Start	9:30 AM	10.00	18.25	5.75	46.0	3.97
	End	9:40 AM		12.50			
	Start	9:40 AM	10.00	12.50	4.00	32.0	3.84
	End	9:50 AM		8.50			
	Start	9:50 AM	10.00	8.50	3.75	30.0	5.22
	End	10:00 AM		4.75			
Start	10:00 AM	20.00	4.75	6.75	54.0	2.63	
End	10:20 AM		22.00				
2	Start	10:20 AM	20.00	22.00	7.50	60.0	2.22
	End	10:40 AM		14.50			
	Start	10:40 AM	20.00	14.50	7.75	62.0	3.68
	End	11:00 AM		6.75			
	Start	11:00 AM	20.00	6.75	7.25	58.0	2.54
	End	11:20 AM		23.50			
Test Results							
Infiltration Rate, I _t (in/hr):			1.9	Factored Infiltration Rate, K _m (in/hr):			0.9

SHALLOW QUICK INFILTRMETER TEST
Native Soil Assessment for Small Infiltration Based Stormwater Control Measures

Test Information							
Test No.:	P-3	Test Date:	2/2/2023	Test By:	JP	Job No.:	22141
Location of Test:		P-3, SW of site near proposed bioswale					
Soil Information							
% Gravel	0.0	% Sand	80.9	% Silt	19.1	% Clay	-
USCS Description:		Silty Sand		USCS Classification:		SM	
Test Configuration & Constants							
Existing Surface Elevation (ft.)		165.0		Boring Depth from Top of Pipe (ft.)		6.0	
Bioswale Invert Elevation (ft.)		-		Diameter of Perforated Pipe (in.)		3.75	
Bottom of Boring Elevation (ft.)		160.2		Diameter of Test Boring (in.)		8.0	
Boring Depth (ft.)		4.8		Cross-Section Area of Boring (in ²)		50.2	
Constant Head Infiltration Data							
Interval		Actual Time (hr:min)	Interval Time (min)	Water Head (in)	Initial Fill Volume (in ³)	Final Fill Volume (in ³)	Infiltration Volume (in ³)
0	Start	9:24 AM	30	24.5	277.2	981.8	2.1
	End	9:54 AM					
Infiltration Data							
Interval		Actual Time (hr:min)	Interval Time (min)	Flow Readings		Infiltration Volume (in ³)	Infiltration Rate (in/hr)
				Water Elev. (in)	Change in Elev (in)		
1	Start	9:54 AM	10.00	24.00	2.00	16.0	0.96
	End	10:04 AM		22.00			
	Start	10:04 AM	10.00	22.00	2.00	16.0	1.04
	End	10:14 AM		20.00			
	Start	10:14 AM	10.00	20.00	0.75	6.0	0.42
	End	10:24 AM		19.25			
	Start	10:24 AM	30.00	19.25	1.75	14.0	0.34
	End	10:54 AM		17.50			
	Start	10:54 AM	30.00	17.50	2.00	16.0	0.43
	End	11:24 AM		15.50			
	Start	11:24 AM	30.00	15.50	2.00	16.0	0.48
	End	11:54 AM		13.50			
Test Results							
Infiltration Rate, I _t (in/hr):			0.3	Factored Infiltration Rate, K _m (in/hr):			0.1

APPENDIX C

Seismically Induced Settlement Calculations



SPT BASED LIQUEFACTION ANALYSIS REPORT

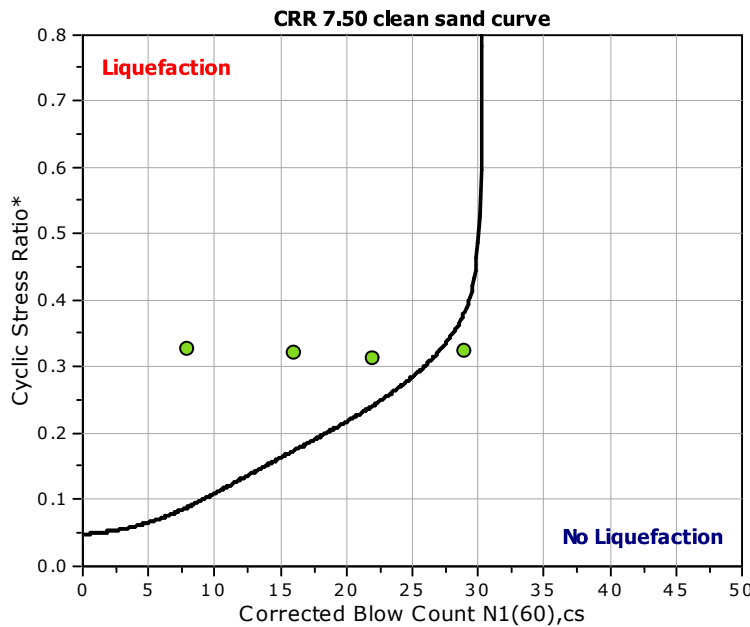
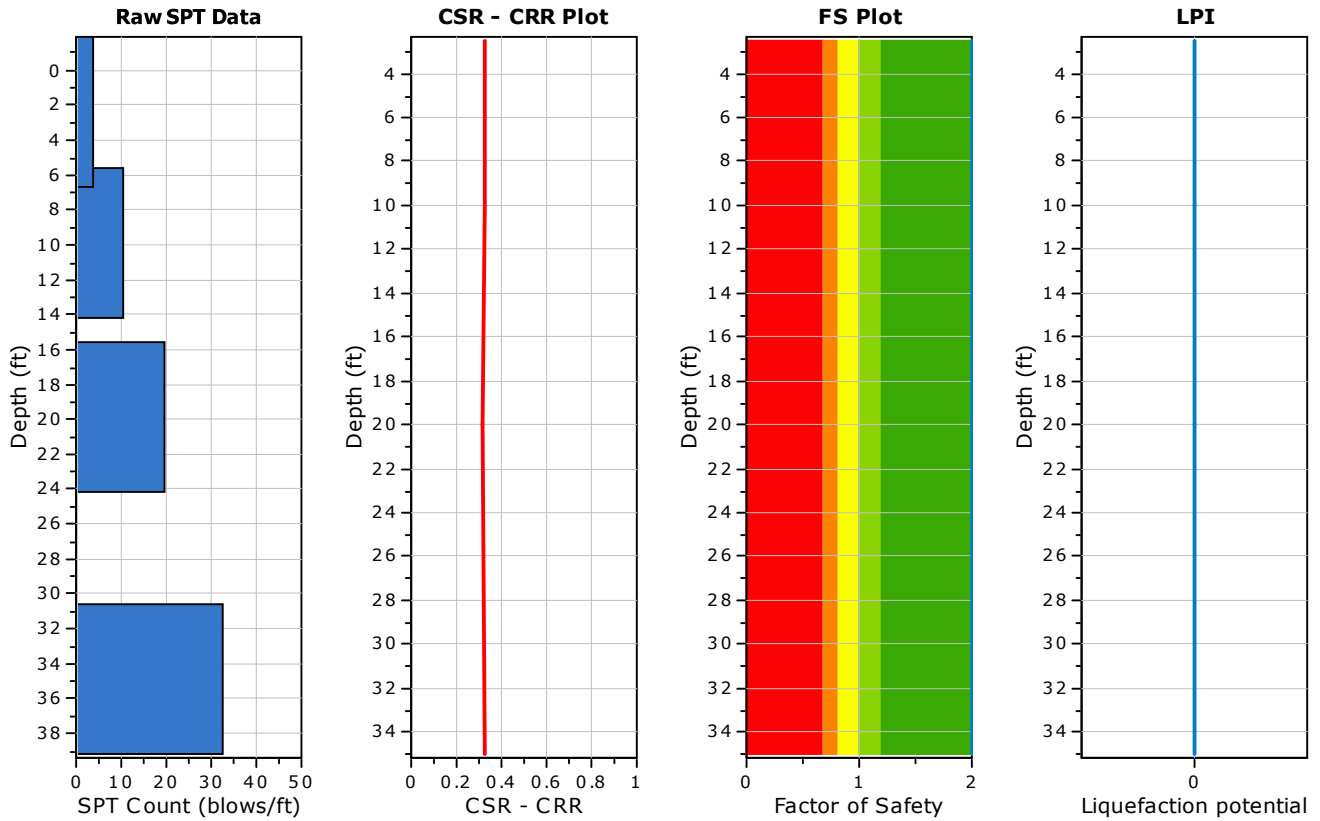
Project title : Seaside Fire Station No. 2

SPT Name: Site Model

Location : Seaside, California

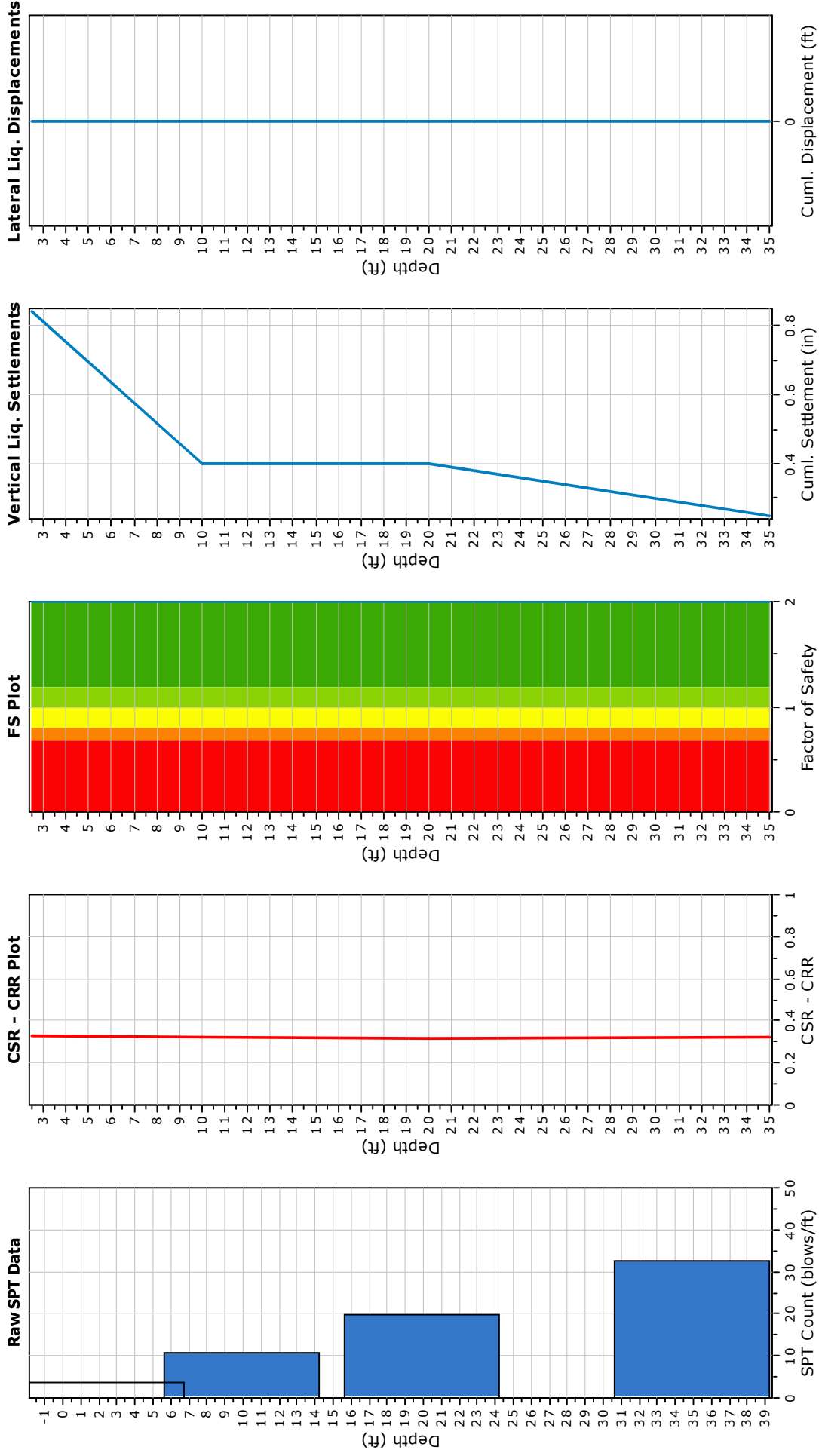
:: Input parameters and analysis properties ::

Analysis method:	NCEER 1998	G.W.T. (in-situ):	70.00 ft
Fines correction method:	NCEER 1998	G.W.T. (earthq.):	70.00 ft
Sampling method:	Standard Sampler	Earthquake magnitude M_w :	7.10
Borehole diameter:	200mm	Peak ground acceleration:	0.58 g
Rod length:	3.00 ft	Eq. external load:	0.00 tsf
Hammer energy ratio:	1.00		



- F.S. color scheme**
- Almost certain it will liquefy
 - Very likely to liquefy
 - Liquefaction and no liq. are equally likely
 - Unlike to liquefy
 - Almost certain it will not liquefy
- LPI color scheme**
- Very high risk
 - High risk
 - Low risk

:: Overall Liquefaction Assessment Analysis Plots ::



:: Field input data ::					
Test Depth (ft)	SPT Field Value (blows)	Fines Content (%)	Unit Weight (pcf)	Infl. Thickness (ft)	Can Liquefy
2.50	4	13.00	111.00	5.00	Yes
10.00	11	15.00	113.00	10.00	No
20.00	20	3.00	97.00	10.00	Yes
35.00	33	3.00	97.00	25.00	Yes

Abbreviations

Depth: Depth at which test was performed (ft)
 SPT Field Value: Number of blows per foot
 Fines Content: Fines content at test depth (%)
 Unit Weight: Unit weight at test depth (pcf)
 Infl. Thickness: Thickness of the soil layer to be considered in settlements analysis (ft)
 Can Liquefy: User defined switch for excluding/including test depth from the analysis procedure

:: Cyclic Resistance Ratio (CRR) calculation data ::																
Depth (ft)	SPT Field Value	Unit Weight (pcf)	σ_v (tsf)	u_o (tsf)	σ'_{vo} (tsf)	C_N	C_E	C_B	C_R	C_S	$(N_1)_{60}$	Fines Content (%)	α	β	$(N_1)_{60cs}$	CRR _{7.5}
2.50	4	111.00	0.14	0.00	0.14	1.70	1.00	1.15	0.75	1.00	6	13.00	1.89	1.04	8	4.000
10.00	11	113.00	0.56	0.00	0.56	1.37	1.00	1.15	0.75	1.00	13	15.00	2.50	1.05	16	4.000
20.00	20	97.00	1.05	0.00	1.05	1.01	1.00	1.15	0.95	1.00	22	3.00	0.00	1.00	22	4.000
35.00	33	97.00	1.77	0.00	1.77	0.77	1.00	1.15	1.00	1.00	29	3.00	0.00	1.00	29	4.000

Abbreviations

σ_v : Total stress during SPT test (tsf)
 u_o : Water pore pressure during SPT test (tsf)
 σ'_{vo} : Effective overburden pressure during SPT test (tsf)
 C_N : Overburden correction factor
 C_E : Energy correction factor
 C_B : Borehole diameter correction factor
 C_R : Rod length correction factor
 C_S : Liner correction factor
 $N_{1(60)}$: Corrected N_{SPT} to a 60% energy ratio
 α, β : Clean sand equivalent clean sand formula coefficients
 $N_{1(60)cs}$: Corrected $N_{1(60)}$ value for fines content
 CRR_{7.5}: Cyclic resistance ratio for M=7.5

:: Cyclic Stress Ratio calculation (CSR fully adjusted and normalized) ::													
Depth (ft)	Unit Weight (pcf)	$\sigma_{v,eq}$ (tsf)	$u_{o,eq}$ (tsf)	$\sigma'_{vo,eq}$ (tsf)	r_d	α	CSR	MSF	CSR _{eq,M=7.5}	K_{σ}	CSR*	FS	
2.50	111.00	0.14	0.00	0.14	1.00	1.00	0.376	1.15	0.327	1.00	0.327	2.000	●
10.00	113.00	0.56	0.00	0.56	0.98	1.00	0.369	1.15	0.321	1.00	0.321	2.000	●
20.00	97.00	1.05	0.00	1.05	0.96	1.00	0.361	1.15	0.314	1.00	0.314	2.000	●
35.00	97.00	1.77	0.00	1.77	0.89	1.00	0.336	1.15	0.292	0.90	0.324	2.000	●

Abbreviations

$\sigma_{v,eq}$: Total overburden pressure at test point, during earthquake (tsf)
 $u_{o,eq}$: Water pressure at test point, during earthquake (tsf)
 $\sigma'_{vo,eq}$: Effective overburden pressure, during earthquake (tsf)
 r_d : Nonlinear shear mass factor
 α : Improvement factor due to stone columns
 CSR: Cyclic Stress Ratio (adjusted for improvement)
 MSF: Magnitude Scaling Factor
 CSR_{eq,M=7.5}: CSR adjusted for M=7.5
 K_{σ} : Effective overburden stress factor
 CSR*: CSR fully adjusted (user FS applied)***
 FS: Calculated factor of safety against soil liquefaction

*** User FS: 1.00

:: Liquefaction potential according to Iwasaki ::

Depth (ft)	FS	F	wz	Thickness (ft)	I _L
2.50	2.000	0.00	9.62	7.50	0.00
10.00	2.000	0.00	8.48	7.50	0.00
20.00	2.000	0.00	6.95	10.00	0.00
35.00	2.000	0.00	4.67	15.00	0.00

Overall potential I_L : 0.00

I_L = 0.00 - No liquefaction

I_L between 0.00 and 5 - Liquefaction not probable

I_L between 5 and 15 - Liquefaction probable

I_L > 15 - Liquefaction certain

:: Vertical settlements estimation for dry sands ::

Depth (ft)	(N ₁) ₆₀	τ _{av}	p	G _{max} (tsf)	a	b	γ	ε ₁₅	N _c	ε _{Nc} (%)	Δh (ft)	ΔS (in)
2.50	6	0.05	0.09	272.58	0.13	20933.42	0.00	0.00	11.65	0.37	5.00	0.440
10.00	13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.000
20.00	22	0.38	0.70	1049.29	0.16	6224.26	0.00	0.00	11.65	0.06	10.00	0.151
35.00	29	0.60	1.19	1497.65	0.19	4535.87	0.00	0.00	11.65	0.04	25.00	0.249

Cumulative settlements: 0.839

Abbreviations

τ_{av}: Average cyclic shear stress

p: Average stress

G_{max}: Maximum shear modulus (tsf)

a, b: Shear strain formula variables

γ: Average shear strain

ε₁₅: Volumetric strain after 15 cycles

N_c: Number of cycles

ε_{Nc}: Volumetric strain for number of cycles N_c (%)

Δh: Thickness of soil layer (in)

ΔS: Settlement of soil layer (in)

:: Lateral displacements estimation for saturated sands ::

Depth (ft)	(N ₁) ₆₀	D _r (%)	γ _{max} (%)	d _z (ft)	LDI	LD (ft)
2.50	6	34.29	0.00	5.00	0.000	0.00
10.00	13	50.48	0.00	10.00	0.000	0.00
20.00	22	65.67	0.00	10.00	0.000	0.00
35.00	29	75.39	0.00	25.00	0.000	0.00

Cumulative lateral displacements: 0.00

Abbreviations

D_r: Relative density (%)

γ_{max}: Maximum amplitude of cyclic shear strain (%)

d_z: Soil layer thickness (ft)

LDI: Lateral displacement index (ft)

LD: Actual estimated displacement (ft)

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Appendix G

Phase I Environmental Site Assessment



PHASE I ENVIRONMENTAL SITE ASSESSMENT

FIRE STATION NO. 2

SEASIDE, MONTEREY COUNTY, CALIFORNIA

Prepared for:

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Public Works Director
City of Seaside
440 Harcourt Avenue
Seaside, California 92955

May 15, 2023

Prepared By:

Kimley»»Horn

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Kimley-Horn Project No. 194460002.1.100

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LIST OF ACRONYMS

AAI	All Appropriate Inquiries
AOC	Area of Concern
AST	Aboveground storage tank
ASTM	American Society for Testing and Materials
BER	Business Environmental Risks
CREC	Controlled Recognized Environmental Conditions
EP	Environmental Professional
EPA	Environmental Protection Agency
ESA	Phase I Environmental Site Assessment
HREC	Historical Recognized Environmental Conditions
LLP	Landowner Liability Protections
LQG	Large Quantity Generators
LUST	Leaking Underground Storage Tank
NPL	National Priority List
REC	Recognized Environmental Condition
SQG	Small Quantity Generator
TSDf	Treatment, Storage and Disposal
USGS	United States Geological Survey
UST	Underground storage tank
VDEQ	Virginia Department of Environmental Quality
VEC	Vapor Encroachment Condition
VES	Vapor Encroachment Screening
VSQG	Very Small Quantity Generators

1.0 EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained by the City of Seaside (the “Client”) to conduct a Phase I Environmental Site Assessment (ESA) for the future Fire Station No. 2 on the city-owned northwest corner of Gigling Road and 1st Avenue, described as an approximately 4-acre portion of Assessor Parcel Number (APN) 031-151-012 in the City of Seaside, Monterey County, California (referred to herein as the “Site”). This Phase I ESA was performed in general accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries (AAI), 40 CFR Part 312 and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process/Designation E 1527-21* (ASTM Standard Practice E 1527-21). The ESA was conducted under the supervision or responsible charge of Cassie Bretschger, Environmental Professional.

The Phase I ESA summary is provided below. Specific details were not included or fully developed in this section, and the Phase I ESA must be reviewed in its entirety for a comprehensive understanding of the results. This report represents our services as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the Site’s current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after property renovation or development). Further, these services are not to be construed as legal interpretation or advice.

Viability of this report is subject to ASTM E1527-21 Sections 4.6 and 4.8. This Phase I ESA is presumed viable for up to 180 days from the first date the component listed in Section 4.6 of the ASTM Standard Practice E1527-21 were conducted, which is October 5, 2023.

Component	Date
Interviews	Multiple
Review of Government Records	April 5, 2023
Visual Inspection	April 20, 2023
Declaration by Environmental Professional	May 15, 2023

Subject Property Description and Use

The Site is approximately 4-acres and a part of a greater APN 031-151-012. The Site is located at the northwest corner of the Gigling Road at 1st Avenue intersection. The property is undeveloped and vacant with mature trees and shrubs scattered throughout the larger APN, with the majority of the property open unimproved area. There are overhead electrical lines fronting Gigling Road (southern property boundary). Gigling Road and 1st Street along the properties southern and eastern frontage are paved streets, having no curb and gutter. An existing dirt road/trail off Gigling Road bisects the property into a western and eastern portion, which is west of the 4-acre portion of the Site.

Historical Information

Based on review of aerial imagery and historical data, the Site has been vacant and not developed since at least 1949. There are no indications from aerial photographs of material storage, stockpiles, buildings/structures, or operations within the Site; however, in 1956 the aerial photograph includes a dirt roads or path of travel based on surface coloration within the photo.

The surrounding site is developed with residential and commercial operations including Cal State University at Monterey Bay (CSUMB) as detailed within Section 5.2. Additionally, the Site is associated with the former Fort Ord military base, which operated by the U.S. Army from 1917 and encompasses over 28,000 acres. The surrounding area includes buildings, airfields, testing areas etc. in association with military operations. As described in section 5.3.1, both soil and groundwater are contaminated with differing hazardous substances and petroleum products.

Records Review

Table 1.0-2 Summary of Record Review Dates	
Records Reviewed	Date of Review
Historical Aerials	April 20, 2023
Topographic Maps	April 20, 2023
City Directories	April 20, 2023
Sanborn Fire Insurance Maps	April 20, 2023
Site Reconnaissance	April 20, 2023

Site Reconnaissance

The site is vacant and undeveloped land with densely covered vegetation. Power lines are observed along the southern boundary of the property along Gigling Road. Within the southeast portion of the Site an approximately 13-foot by 7.5-foot concrete platform with indications of former signage was observed.

At the time of inspection, the property was marked with survey flags denoting underground utilities with orange flags representing communication lines and yellow flags representing natural gas lines.

Evidence for storage and/or use of hazardous materials was not identified at the Site during the Site inspection. There were no site observations indicative of a REC at this time.

Opinions and Conclusions

Kimley-Horn has performed a Phase I ESA in conformance with the scope and limitations of ASTM Practice E1527-21 for the approximately 4-acre subject property located at Gigling Road and 1st Avenue, in the City of Seaside, Monterey County.

This assessment has revealed no evidence of recognized environmental conditions (RECs) associated with the Site.

This assessment has revealed no evidence of Controlled RECs (CRECs) associated with the Site except the following:

Activity and Use Limitations (AUL) was identified in association with Site and larger APN. Limitations included notifications for the presence of contaminated groundwater, presence of munitions and explosives of concern (MEC), rare, threatened and endangered species management, and right to access land for environmental activities under a CERLA covenant.

Based on review historical records, the property is within the "Consultation Zone" for the "Special Groundwater Protection Zone", which is defined for areas surrounding the "Prohibition Zone" for contaminated groundwater. The Prohibition Zone includes areas with known groundwater impacts and any extraction or groundwater may be intrusive within one of the four contamination plumes associated within former Fort Ord.

As addition of a groundwater well or future use of groundwater is not planned for the proposed redevelopment for the Fire Station No. 2, the CREC is not considered to impact future

development. If redevelopment plans change to include groundwater wells onsite, consultation with the US EPA, DTSC and RWQCB will be required.

This assessment has revealed no evidence of Historical RECs (HRECs) associated with the Site.

If during grading or redevelopment, evidence for soil contamination is identified such as staining or odors, the potential presence of an undocumented buried structures or piping are identified, further evaluations and soil sampling would be recommended.

2.0 INTRODUCTION

2.1 SUBJECT PROPERTY OVERVIEW

Table 2.1 Subject Property Overview	
Site Name	City of Seaside Fire Station No. 2
Site Location/Address	Northwest corner of Gigling Road at 1 st Avenue intersection
Land Area	Approximately 4 acres
Legal Description	The subject property consists of an approximately 4-acre portion of a larger 29-acre parent parcel containing (APN: 031-151-012)
Site Improvements	Overall site conditions include mature trees and shrubs throughout the property, with three dirt road access points from Gigling Road. No curb or gutter are observed along the property frontage along Gigling Road or 1st Avenue; however, there are overhead electrical lines fronting Gigling Road.

The site vicinity location is depicted on Figure 1. The subject property and adjoining properties are depicted on the Aerial Map, **Figure 2**. Figures are included in **Appendix A**. Photographs of the subject property are included in **Appendix B**.

2.2 PURPOSE AND SCOPE OF SERVICES

This Phase I ESA was performed in general accordance with (1) the United States Environmental Protection Agency (USEPA) Standards and Practices for All Appropriate Inquiries {(AAI), 40 CFR Part 312} and (2) guidelines established by the American Society for Testing and Materials (ASTM) in the *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process/Designation E 1527-21* (ASTM Standard Practice E 1527-21).

The purpose of this Phase I ESA was to evaluate the current and historical conditions of the subject property in an effort to identify *recognized environmental conditions* (RECs), *controlled recognized environmental conditions* (CRECs) and *historical recognized environmental conditions* (HRECs) in connection with the subject property. This Phase I ESA is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs, CRECs and HRECs in connection with the subject property.

Additionally, this Phase I ESA was designed to assist the client in developing information to identify RECs in connection with the subject property as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, and a visual, noninvasive reconnaissance of the subject property and adjoining properties. Limitations, ASTM deviations, and significant data gaps (if identified) are noted in the applicable sections of the report.

ASTM E1527-21 contains a new definition of "migrate/migration," which refers to "the movement of hazardous substances or petroleum products in any form, including, for example, solid and liquid at the surface or subsurface, and vapor in the subsurface." By including this explicit reference to migration in ASTM E1527-21, the Standard clarifies that the potential for vapor migration should be addressed as part of a Phase I ESA. This Phase I ESA has considered vapor migration in evaluation of RECs associated with the Site.

2.3 USER RELIANCE

This Phase I ESA report represents the product of Kimley-Horn's expertise and judgment in the environmental consulting industry. This report is certified to, can be relied upon by, and has been prepared for the exclusive use of the following entities: Kimley-Horn and Associates, Inc. (Kimley-Horn); and the City of Seaside, and their respective successors, assigns, affiliates, and subsidiaries. Kimley-Horn acknowledges that these parties may rely on the contents and conclusions presented in this report. Unless stated otherwise in writing, Kimley-Horn makes no other warranty, representation, or extension of reliance upon the findings of this report to any other entity or third party.

Reliance on the Phase I ESA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal with Kimley-Horn and Associates, Inc. Standard Provisions and the Phase I ESA report. The limitation of liability defined in the Standard Provisions is the aggregate limit of Kimley-Horn's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E1527-21 Sections 4.6 and 4.8. If the Phase I ESA will be used by a different user (third party) than the user for whom the Phase I ESA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-21.

2.4 SIGNIFICANT ASSUMPTIONS

Pursuant to ASTM Standard Practice E 1527-21, Kimley-Horn assumes that the information provided by all sources and parties, including the User, is accurate and complete, except where obvious inconsistencies or inaccuracies were identified.

2.5 LIMITATIONS, DEVIATIONS, AND SPECIAL TERMS AND CONDITIONS

There were no deviations from the ASTM Standard during the preparation of this report. Any physical limitations identified during the completion of this report are referenced in Section 4.0.

This Phase I ESA is presumed viable for up to 180 days from the first date the component listed in Section 4.6 of the ASTM Standard Practice E1527-21 were conducted, which is October 5, 2023.

Based upon the agreed-on scope of services, this Phase I ESA did not include subsurface or other invasive assessments, vapor intrusion assessments or indoor air quality assessments (i.e., evaluation of the presence of vapors within a building structure), or other services not particularly identified and discussed herein. Credentials of the company (Statement of Qualifications) have not been included in this report but are available upon request. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Information obtained for this ESA was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder.

- Kimley-Horn reviewed reasonably ascertainable records to identify obvious uses of the subject property from the present, back to 1949 provided by EDR. Records dating back to 1940 were not available other than records obtained providing documentation for the former Fort Ord history. This constitutes a data failure, which is a type of data gap; however, the data gap is not considered significant because other information did not raise reasonable concerns involving the data gap. Standard and other historical sources were able to document that the site has not been developed since at least 1949.

An evaluation of the significance of limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the

report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

3.0 USER PROVIDED INFORMATION

The ASTM Standard defines a User as “the party seeking to use Practice E 1527-21 to complete an environmental site assessment of the subject property. A User may include, without limitation, a potential purchaser of subject property, a potential tenant of subject property, an owner of the subject property, a lender, or a property manager.” The User has specific obligations for completing a successful application of this practice as outlined in Section 6 of the ASTM Standard Practice E 1527-21.

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfield’s Revitalization Act of 2001 (the “Brownfield’s Amendments”), the User must provide certain information (if available) identified in the User Questionnaire to the Environmental Professional (EP). Failure to provide this information could result in a determination that “all appropriate inquiry” is not complete.

3.1 USER QUESTIONNAIRE

Kimley-Horn provided the Client with an ASTM User Questionnaire for them to communicate this User provided information to Kimley-Horn. A copy of the User questionnaire is included in **Appendix C** and the answers to this questionnaire have been incorporated into this report as appropriate.

3.2 RECORDED LAND TITLE RECORDS

A 50-year chain of title search was not conducted for the subject property by Kimley-Horn. Furthermore, the User did not provide Kimley-Horn with a 50-year chain of title. Unless notified otherwise, we assume that the client is evaluating this information outside the scope of this report. As such, this is considered a limiting condition; however, based on the other data reviewed for the subject property, it is not considered a significant data gap.

3.3 ENVIRONMENTAL LIENS, ACTIVITY AND USE LIMITATIONS, AND GOVERNMENT INSTITUTIONAL AND ENGINEERING CONTROLS

An Environmental Lien/Activity and Use Limitations Search was produced by EDR and was reviewed as part of this Phase I ESA (**Appendix D**). The title and property is vested to the Redevelop Agency City of Seaside data December 28, 2006. No liens were associated with the subject property; however, AULs were identified. Land use limitation was found along with notifications presence of contaminated groundwater, presence of munitions and explosives of concern (MEC), rare, threatened and endangered species management, and right to access land for environmental activities under a CERLA covenant. In addition, the documents confirmed that the APN is conveyed “as is, where is” condition. The AUL in association with the Site is considered a CREC.

4.0 SITE RECONNAISSANCE

Information contained in this section is based on a visual reconnaissance conducted while walking through the subject property and the accessible interior areas of structures, if any, located on the subject property. The subject property and adjoining properties are depicted on the Site Plan, which is included in Figure 2 of **Appendix A**. Photo documentation of the subject property at the time of the visual reconnaissance is provided in **Appendix B**.

As described below, Kimley-Horn completed site reconnaissance on April 20, 2023, which was conducted by Cassie Bretschger. The Fire Station No. 2 boundary for field survey was approximate and for conservative measures, the entire southeastern portion of the property was inspected inclusive of the approximately 4-acre future Fire Station Number 2. No access constraints were identified during inspection; however, dense vegetation covered a majority of the Site.

The inspection followed a pattern of moving from east to west across the Site. Kimley-Horn staff accessed the Site via existing access roads, and walked throughout the Site areas that were not accessible via access roads. Table 4.1 includes items that were visually reviewed for the presence or absence of within the Site.

Table 4 Summary of General Site Information				
Site Reconnaissance				
Field Personnel	Cassie Bretschger			
Date	April 20, 2023			
Weather Conditions	Partly cloudy			
Subject Property Contact/Title	None			
Building Description				
Building/Improvement Id	Building Use	Year Built	Number of Stories	Approx Sq FT
None	--	--	--	--

4.1 SITE OBSERVATIONS

The site is vacant and undeveloped land with densely covered vegetation. Power lines are observed along the southern boundary of the property along Gigling Road. Within the southeast portion of the Site an approximately 13-foot by 7.5-foot concrete platform with indications of former signage is observed.

At the time of inspection, the property was marked with survey flags denoting underground utilities with orange flags representing communication lines and yellow flags representing natural gas lines.

Evidence for storage and/or use of hazardous materials was not identified at the Site during the Site inspection. There were no site observations indicative of a REC at this time.

The following table summarizes the subject property observations. Affirmative responses are discussed in more detail following the table.

Table 4.1 Summary of Site Observations		
Category	Item or Feature	Observed or Identified
Site Operations, Processes, and Equipment	Emergency generators	No
	Elevators	No
	Air compressors	No
	Hydraulic lifts	No
	Dry cleaning	No
	Photo processing	No
	Ventilation hoods and/or incinerators	No
	Waste treatment systems and/or water treatment systems	No

Table 4.1 Summary of Site Observations		
Category	Item or Feature	Observed or Identified
	Heating and/or cooling systems	No
	Paint booths	No
	Sub-grade mechanic pits	No
	Wash-down areas or carwashes	No
	Pesticide/herbicide production or storage	No
	Printing operations	No
	Metal finishing (e.g., electroplating, chrome plating, galvanizing, etc.)	No
	Salvage operations	No
	Oil, gas or mineral production	No
	Other processes or equipment	No
Aboveground Chemical or Waste Storage	Aboveground storage tanks	No
	Drums, barrels and/or containers ≥ 5 gal	No
	MSDS or SDS	No
Underground Chemical or Waste Storage, Drainage or Collection Systems	USTs or ancillary UST equipment	No
	Sumps, cisterns, French drains, catch basins and/or dry wells	No
	Grease traps	No
	Septic tanks and/or leach fields	No
	Oil/water separators, clarifiers, sand traps, triple traps, interceptors	No
	Pipeline markers	Yes
	Interior floor drains	No
Electrical Transformers/PCBs	Transformers and/or capacitors	No
	Other equipment	No
Releases or Potential Releases	Stressed vegetation	No
	Stained soil	No
	Stained pavement or similar surface	No
	Leachate and/or waste seeps	No
	Trash, debris and/or other waste materials	No
	Dumping or disposal areas	No
	Construction/demolition debris and/or dumped fill dirt	No
	Surface water discoloration, odor, sheen, and/or free-floating product	No
	Strong, pungent or noxious odors	No
	Exterior pipe discharges and/or other effluent discharges	No
Other Notable Site Features	Surface water bodies	No
	Quarries or pits	No
	Wastewater lagoons	No
	Wells	No

4.2 CURRENT OPERATIONS

The site is undeveloped and vacant with current ownership of the property is listed to the Redevelopment Agency of the City of Seaside. Overall site conditions include mature trees and shrubs throughout the property, with three dirt road access points from Gigling Road within the areas outside of the future Fire Station No. 2 boundary. No curb or gutter are observed along the property frontage along Gigling Road or 1st Avenue; however, there are overhead electrical lines fronting Gigling Road.

4.3 ADJOINING PROPERTIES

The following section provides information about the adjoining properties obtained during the subject property reconnaissance and through review of reasonably ascertainable information. Visual observations of adjoining properties (from subject property boundaries) are summarized below.

Table 4.3 Summary of Adjoining Properties		
Direction	Description	REC/BER
North	The subject property is bounded to the north by undeveloped vegetation followed by Lightfighter Drive. Fort Ord Parcels S3.2.1, S4.1.2.1, and E15.1	Kimley-Horn has not identified any of these properties as a REC based on their current uses. Parcels S.4.2.1 and E15.1 both have land use covenants for groundwater. This is identified as a CREC.
East	The subject property is bounded to the east by 1 st Avenue followed by commercial uses (Ord Community Commissary, Central Coast Federal Credit Union, Habitat for Humanity ReStore Monterey). Fort Ord Parcels F2.3.2 and F 2.3	Kimley-Horn has not identified any of these properties as a REC based on their current uses. These parcels have no land use controls.
South	The subject property is bounded to the south by Gigling Road followed by single-family residential development. Fort Ord Parcels F2.2 and E20b	Kimley-Horn has not identified any of these properties as a REC based on their current uses. These parcels have no land use controls
West	The subject property is bounded to the west by undeveloped vegetation followed by Cabrillo Highway, and Fort Ord Dunes State Park. Fort Ord Parcels S4.1.2.1	Kimley-Horn has not identified any of these properties as a REC based on their current uses. Parcels S.4.2.1 have a land use covenants for groundwater. This is identified as a CREC

Fort Ord Parcels were evaluated based on Monterey County Resource Management Agency database: [Fort Ord Land Use Covenants \(arcgis.com\)](https://arcgis.com)

5.0 RECORDS REVIEW

5.1 PHYSICAL SETTING

The following is a summary of the physical setting of the subject property.

Table 5.1 Summary of Physical Setting of the Subject Property		
Physical Setting Information		Source
Topography		
Site Elevation	Approximately 173 feet above mean sea level	United States Geological Survey Division (U.S.G.S.) 7.5-Minute Topographic Map of the Seaside Quadrangle, (2018) (Appendix E)
Topographic Gradient/ Surface Water Runoff	General WNW	
Closest Surface Water	Surface water release indicator not reported	
Soil Characteristics		
Soil Type; Description	One soil type on the subject property: Oceano loamy sand, with 2 to 15 percent slopes, Class A- high infiltration rates with deep soils well drained to excessively drained sands and gravel, moderate corrosion potential	United States Department of Agriculture, Soil Survey: https://websoilsurvey.nrcs.usda.gov/app/ , accessed April 20, 2023.
Geology/Hydrogeology		
Geologic Formation	Quaternary- Cenozoic	P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

5.2 HISTORICAL RECORDS REVIEW

Kimley-Horn reviewed reasonably ascertainable records provided by Lightbox to identify obvious uses of the subject property from the present, back to 1949. Records dating back to 1940 were not available. This constitutes a data failure, which is a type of data gap; however, the data gap is not considered significant because other information and/or personal experience did not raise reasonable concerns involving the data gap. Standard and other historical sources were able to document that the site has not been developed since at least 1949.

Readily available historical USGS topographic maps, city directories (at approximately 5-year intervals), selected historical aerial photographs (at approximately 10 to 15-year intervals), city directories, and historical fire insurance maps produced by the Sanborn Map Company were requested from Lightbox (formerly EDR) to evaluate past uses and relevant characteristics of the subject property and surrounding properties. Based upon the inquiries to the above-listed Sanborn provider, Sanborn maps were not available for this subject property.

Reviewed historical topographic maps, city directories, and aerial photographs are summarized below. The sources and years reviewed are identified below. Topographic maps, city directories, aerial photographs, and Sanborn maps are included in **Appendix D**.

- Topographic map: Seaside and Marina Quadrangles, dated 2018, 2015, 2012, 1983, 1974, 1968, 1948, 1947, 1941, 1913 (USGS 7.5 Minute Quadrangle)
- City Directories: 2020, 2017, 2014, 2010, 2005, 2000, 1995, 1992, 1987, 1982, 1977, 1972, 1969, 1964, 1959
- Aerial photographs: 2020, 2016, 2012, 2009, 2005, 1998, 1987, 1981, 1974, 1968, 1956, 1949
- Sanborn Fire Insurance Maps: No fire insurance maps are available for the subject property.

Direction	Description
Subject property	The subject property is and has been since at least 1949 vacant with undisturbed land with natural vegetation. Trails appear to have been present in 1949 and 1956 but fade over time.
North	The area to the north of the subject property is vacant with undisturbed land with natural vegetation. Cabrillo Highway is visible since 1949 but was paved sometime between 1956 and 1968.
East	The area to the east of the subject property was vacant with undisturbed land until sometime between 1968 and 1974 when commercial uses (currently the Ord Commissary and other retail uses) was developed along with associated roadway infrastructure.
South	The area to the south of the subject property was vacant with undisturbed land until sometime between 1949 and 1956 when single family residences and Gigling Road were constructed. Between 1956 and 1968 additional single-family residences and associated roadway and recreational uses were developed.
West	The area to the west of the subject property has been vacant with undisturbed land, except for a trail running north/south.

The city directories used in this study were made available through EDR (selected years reviewed: 1943-2020) and were reviewed at approximate five-year intervals, if readily available (**Appendix D**). City directories indicate the subject property was occupied as recently as 2020. There were no RECs identified during the review of the City Directories.

5.3 REGULATORY RECORDS REVIEW

An environmental database search for the subject property and the surrounding area was performed by Lightbox (formerly EDR), a contract information services company, using ASTM E1527-21 standard radii. The purpose of the records review was to identify RECs in connection with the subject property. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated, and the scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases. A copy of the EDR Radius Map Report with GeoCheck is attached in its entirety in **Appendix E**.

In some of the following subsections, the words up-gradient, cross-gradient and down-gradient refer to the topographic gradient in relation to the subject property. The groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the subject property cannot be directly ascertained.

5.3.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate subject property boundaries. Database definition, descriptions, and the database search report are included in **Appendix E**.

Table 5.3-1 Summary of Federal and State Database Results		
Regulatory Agency Database	Search Distance (Miles)	Number of Sites
Federal Databases		
National Priority List (NPL)	1	1
Proposed NPL	1	0
NPL Liens	1	0
Delisted NPL	1	0
Federal Facility	0.5	0
Superfund Enterprise Management System (SEMS)	0.5	1
SEMS-ARCHIVE	0.5	0
Corrective Action Report (CORRACTS)	1	1
RCRA - Treatment, Storage and Disposal (RCRA-TSDF)	0.5	1
RCRA - Large Quantity Generators (RCRA-LQG)	0.25	1
RCRA - Small Quantity Generators (RCRA-SQG)	0.25	0
RCRA - Very Small Quantity Generators (RCRA-VSQG)	0.25	0
Land Use Control Information System (LUCIS)	0.5	0
Engineering Controls Sites List (US ENG CONTROLS)	0.5	1
Institutional Controls Sites List (US INST CONTROLS)	0.5	1
Emergency Response Notification System (ERNS)	Subject Property	Not Reported
State Databases		
Solid Waste Facilities/Landfill Sites (SWF/LF)	0.5	0
Leaking Underground Storage Tank Sites (LUST)	0.5	0
Leaking Petroleum Storage Tanks (LTANKS)	0.5	0
FEMA Underground Storage Tank Listing (UST)	0.25	0
Registered Petroleum Storage Tanks (AST)	0.25	0
Engineering Controls Sites Listing (ENG CONTROLS)	0.5	1
Voluntary Remediation Program (INST CONTROL)	0.5	1
Voluntary Cleanup Program (VCP)	0.5	0
Brownfields Site Specific Assessments (Brownfields)	0.5	0

In addition to the above ASTM-required listings, Kimley-Horn reviewed other federal, state, local, and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in **Appendix E**.

The following table summarizes the site-specific information provided by the database and/or gathered by this office for select facilities in the vicinity of the subject property. Kimley-Horn’s review of the referenced databases also considered the potential or likelihood of contamination from adjoining and nearby facilities. To evaluate which of the adjoining and nearby facilities identified in the regulatory database report present an environmental risk to the subject property, Kimley-Horn considered the following criteria:

- The type of database on which the adjoining/nearby property is identified.
- The topographic position of the property relative to the subject property.
- The direction and distance of the identified facility from the subject property.
- Local soil conditions in the subject property area.
- The known and/or inferred groundwater flow direction in the subject property area.
- The status of the respective regulatory agency-required investigations and/or cleanup associated with the identified facility.
- Surface and subsurface obstructions and diversions (e.g., buildings, roads, sewer systems, utility service lines, rivers, lakes, and ditches) located between the identified facility and the subject property.

Only those facilities that are judged to present a potential environmental risk to the subject property and/or warrant additional clarification are further evaluated and discussed below. The facility(ies) discussed below are listed in order of distance from the subject property.

Facility Name and Location	Estimated Distance / Direction/Gradient	Database Listings	Is a REC, CREC, or HREC to the Subject Property
Fort Ord	1 ft.	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-LQG, US ENG	CREC
Mission Memorial Park and Seaside Funeral Home	1081, 0.205, SSE	CUPA Listing	--
6 Army Rd	1424, 0.270, South	Notify 65	--
Fort Ord State Park	3482, 0.659, NW	ENVIROSTOR, DEED	CREC

Fort Ord and Fort Ord State Park are listed within the EDR databases report within the Site boundary. The larger facility is also listed on the Envirostor website (<https://www.envirostor.dtsc.ca.gov/> accessed April 28, 2023), as an active site as of May 1, 1986. According to Envirostor, For Ord was operated by the U.S. Army from 1917 and encompasses over 28,000 acres. Both soil and groundwater are contaminated with hazardous substances, wastes and munition including industrial solvents, heavy metals, pesticides, polycyclic aromatic hydrocarbons (PAHs), explosives residue and munitions and explosives of concern. All surface and subsurface contamination, with the exception of a groundwater plume, are located within the former base boundary.

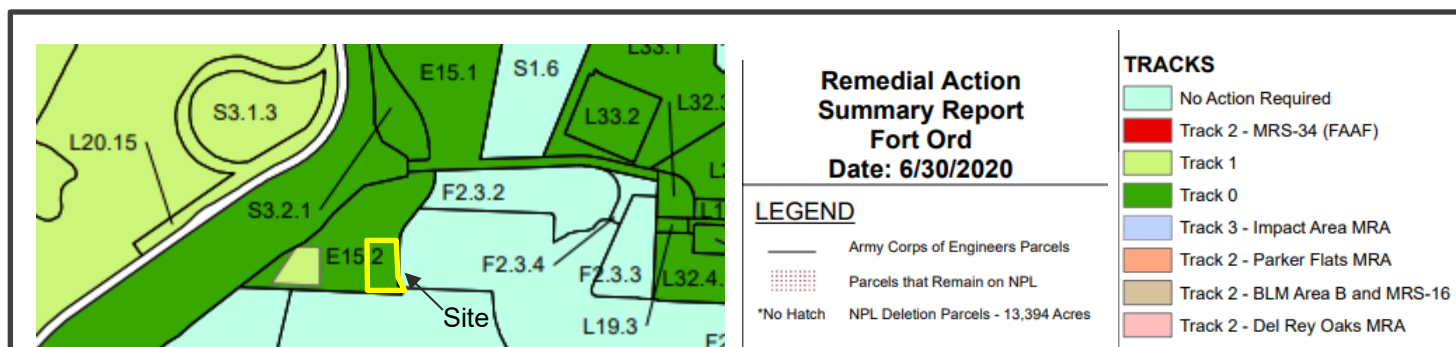
In 1990, a Federal Facility Agreement (FFA) was signed by the Army, U.S. EPA, the Department of Toxic Substances Control (DTSC) and California Regional Water Quality Control Board (RWQCB) inclusive that the former Fort Ord is listed as a National Priorities List (NPL) due to the above mentioned contaminated of concern. In 1991, former Fort Ord was selected for closure under the Base Realignment and Closure (BRAC) Act, and it was officially closed in 1994. The properties were broken into different operable units (OU) and parcel numbers based on historical use and need for assessment.

The Site and larger APN inclusive of the Site is listed as parcel E15.2, which has been determined to have no Land Use Covenants for soil or groundwater based on review of the Fort Ord Land Use Covenant Map from Monterey County GIS database; however, the property is considered to be located within Consultation Zone for groundwater protection with AUL.

In 2000, the Army, U.S. EPA and DTSC signed an agreement to evaluate munitions and explosives of concern (MEC) at the former Fort Ord. The Military Response Program addresses munitions response sites (MRS) that contain or potentially contain MEC. The MRS were divided into four categories identified as Track 0, Track 1, Track 2 and Track 3. based on the previous munition's activities, investigations and known munitions usage. The Site is listed as apart of Track 1 with portions of the adjacent use within the same APN in Track 0.

Additionally, parcel E15.2 was transferred to Fort Ord Reuse Authority (FORA) on July 25, 2006, under Finding of Suitability to Transfer (FOST) 9 (Track 0 Plug-in "C" and Track 1 Parcels). Receipt of the transfer and FOST include documentation of previous literature reviews, and military munitions sampling events to identify that the property is not indicative of for past training involving military munitions or chemical contamination. A copy of FOST 9 is included in **Appendix F**.

Parcel E15.2 was listed as one of the parcels to be included within the NPL Deletion Parcels from the May 15, 2020, Fort Ord Update within The Remedial Action Summary completed by the U.S. Army Corp of Engineers (Army Corp, 2020). The graphic below is a summary highlighting the Site as part of Track 0 parcel. A copy of the complete graphic is included in **Appendix F**.



“Track 0 Areas contain no evidence of MEC and have never been suspected as having been used for military munitions-related activities of any kind. The Track 0 Record of Decision (ROD) was signed in 2002 and requires no action regarding munitions response for the Track 0 areas...”

While not included within the Site but inclusive of the same APN, one Track 1 area was included. Track 1 Sites are defined as “areas where military munitions were suspected to have been used, but no further action is required because investigation has shown the suspected training did not occur; the training did not involve explosive items; or training at these sites involved only the use of practice and/or pyrotechnic items which are not designed to cause injury. The Track 1 ROD was signed in 2005 and included 21 MRSs...The "no further action" remedy allows unrestricted use, therefore, Track 1 is not required to be evaluated in five-year reviews”.

Given the distance to the Site, ongoing remediation for former Fort Ord property, the defined plumes outside of the Site boundary, and FOST determination, this Site is not a REC for the Site.

Additional Sites Reviewed

6 Army Road (1,800 gallon) and Building 100 (900 gallon) is located approximately 0.270 miles southeast of the Site. One listing for a Notify 65 database is reported with no additional information provided. This database record is not an environmental concern for the subject Site.

Mission Monterey Park and Seaside Funeral Home, located at 3301 Monterrey Building 4463 (approximately 0.205 miles southeast of the Site) is listed for a CUPA Listings databased for hazardous materials registration. The property is no longer in use and is not an environmental concern.

5.4 OTHER ENVIRONMENTAL RECORDS

Kimley-Horn reviewed information from the following agencies:

- EPA's Enforcement & Compliance History Online (ECHO)
- EPA's NEPAAssist Database
- USGS National Water Information System Database (NWIS)

Kimley-Horn reviewed the U.S. EPA's Environmental Compliance History Online (ECHO) and NEPAAssist database for records of regulated facilities on and surrounding the subject property. The subject property was not identified in the ECHO as a regulated facility. No violations were issued associated with this listing. There were no regulated facilities noted with significant violations in the vicinity of the subject property.

Kimley-Horn reviewed the USGS NWIS database for records of well construction permit (WCP) wells on the subject property. Review of the available documentation did not identify public supply wells on the subject property.

5.5 VAPOR EVALUATION

The ASTM E 1527-21 document standardizes the terms release and migration consistent with those used in CERCLA and AAI. As such, potentially harmful vapors must be evaluated during the completion of a Phase I ESA.

Kimley-Horn performed a Tier 1 Vapor Encroachment Screening (VES) in accordance with E2600-15 *Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions* (2015) with the purpose of identifying if a Vapor Encroachment Condition (VEC) exists in association with the subject property. A VEC is defined as the presence or likely presence of contaminants of concern (COC) vapors in the subsurface of the subject property caused by a release of hazardous substances and/or petroleum compounds into soil and groundwater. Current and historical uses were evaluated within the Area of Concern (AOC) during the completion of the Tier 1 VES. As indicated in ASTM 2600-15, the radial distance of the AOC for non-petroleum hydrocarbon COCs (i.e., chlorinated VOCs) is 1/3-mile (1,760 ft.) and 1/10 mile (528 ft.) for petroleum hydrocarbons.

Table 5.5 Summary of Sites Identified

Site Identified	Address	Approximate Distance from Site	Chlorinated Solvent (CS) or Petroleum (P) Site	Information
Fort Ord	Former Army Base Fort Ord	<1/10N	Yes	<p>Fort Ord was established in 1917 as a maneuver area and field artillery target range for units then stationed at the Presidio of Monterey. Its primary mission now is training. Industrial operations at Fort Ord include vehicle maintenance areas, a battery charging/repair facility, photographic processing laboratories, spray painting operations, a plastics shop, laundry/dry cleaning facilities, vehicle wash racks, and a small arms repair shop. Chemicals and hazardous wastes were managed and disposed of at Fort Ord. According to tests conducted by the Army in 1986, elevated levels of contaminants were detected in off-base ground water. The contamination is emanating from the base and may be contaminating the drinking water supplies of the City of Marina; however, the exact location of the source has not yet been identified. The contaminants include carbon tetrachloride, tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, and trans-1,2-dichloroethylene. An estimated 38,600 people obtain drinking water from wells within 3 miles of hazardous substances on the fort. Ground water is also used for irrigation. In addition, soil and ground water are contaminated at the Fire Drill Area, where approximately 600 gallons of petroleum products have been spilled. Fort Ord has identified at least 18 other contamination problems. Fort Ord is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. As part of IRP, the Army is implementing a sampling plan to investigate ground water contamination. The Army is treating contaminated soil and ground water at nearby Airfield Fire Drill Area.</p>

In accordance with ASTM E2600-10 (Tier 1) (Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions); there is one potential petroleum hydrocarbon and/or VOC sources for vapor intrusion within the study area of the Site; however, based on our review of available data, the potential risk for vapor intrusion is low.

The former Fort Ord site encompass thousands of acres with known groundwater impacts in surrounding areas, as such the VES returned this property as a concern for the Site. Based on the review of site-specific information detailed in Section 5.3.1, the depth to groundwater wells in surrounding area of the Site ranging from 140-feet to 950-feet below ground surface, and future redevelopment for a commercial/industrial property, soil vapor migration is not considered a REC at this time.

The Tier I VES does not include vapor intrusion and/or indoor air quality considerations associated with existing and/or proposed structures. No vapor sampling was conducted in association with this VES and the subject property.

¹ Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions

5.6 BUILDING DEPARTMENT/PROPERTY APPRAISER INFORMATION

According to records reviewed from the Monterey County Property Appraiser's website, the subject property Parcel ID No. 031-151-012-000 is owned by the Redevelopment Agency of the City of Seaside.

5.7 PRIOR REPORTS

Kimley-Horn was not provided any previous environmental reports for review.

6.0 INTERVIEWS

The objective of completing interviews with knowledgeable subject property contacts is to obtain information about the uses and physical characteristics of the property. The following individuals were interviewed regarding the current and historical use of the subject property.

Interviews

The subject property is owned by the City of Seaside. Kimley-Horn has discussed the property with multiple City representatives including Sheri Damon, City Attorney and Nisha Patel, Public Works Director and City Engineer. Based on interviews Kimley-Horn assumes the following:

- The property was transferred under a Quitclaim Deed to the City and has not been developed.
- The property is currently planned for future development of the City’s Fire Station No. 2.
- Only a portion of the parcel will be developed, which defined the review area for this Phase I ESA.

6.1 STATE AND/OR LOCAL AGENCY INQUIRES

Table 6.1 Summary of State and/or Local Agency Inquires		
Agency Contacted/	Contact Method/Date	Response
Department of Toxic Substance Control	Emailed 4/10/2023	The Department of Toxic Substance Control provided a report on April 11, 2023, responding to a request for records that stated they were unable to locate an address in the county database using the APNs as the database does not include this information. The online database system, Envirostor, was reviewed and information pertaining to the Site is documented within Section 5.3.1. of this report.
County of Monterey Health Department	Submitted on county website 4/10/2023	A request for Public Records Request was submitted online through the Health Department website. A response was received on April 18, 2023, indicating that no UST’s/AST’s/Hazardous Materials files for the Site were found.
Monterey County Environmental Health Bureau	Emailed 4/10/2023	A request for file review was emailed and identified that no records pertaining to USTs, ASTs, or hazardous materials were located for the property.
State Regional Water Quality Control Board	Emailed 4/10/2023 and 6/5/2023	The RWQCB provided an email on June 6, 2023 responding to the request for records stating “property is located within the former Fort Ord boundary but appears to be outside of any current or historical cleanup case” and that additional details to check additional online databases. The RWQCB’s online database system, Geotracker, was reviewed and information pertaining to the Site is documented within Section 5.3.1. of this report.
FORA ESCA Remediation Program	Database Search 4/28/2023	The only listing pertaining to the Site was a memorandum associated with FOST 9.

Copies of the records received, or agency notification documentation is included in **Appendix G**. All information reviewed from online databases is included in **Appendix F**.

7.0 FINDINGS AND OPINIONS

This Phase I ESA included a review of local, state and federal environmental record sources, standard historical sources, aerial photographs, topographic maps; a site reconnaissance of the Site to review current conditions and use.

Historical Use Summary

The subject property is located at the northwest corner of the Gigling Road at 1st Avenue intersection. The site is undeveloped and vacant. There are mature trees and shrubs scattered throughout the greater APN, with the majority of the property open unimproved area.

Based on review of aerial imagery and historical data, the Site has been vacant and not developed since at least 1949. There are no indications from aerial photographs of material storage, stockpiles, buildings/ structures, or operations within the Site; however, in the 1956 aerial photograph dirt roads or path of travel were observed based on surface discoloration within the photo.

Records Review

A review of regulatory databases maintained by county, state, tribal, and federal agencies identified documentation of surrounding soil, groundwater, and potential vapor impacts associated with the past use of former Fort Ord property; however, are not directly associated with the Site.

The Site is a part of the former Fort Ord base, which has been under environmental review with multiple jurisdictions including DTSC, RWQCB, EPA, BRAC, and FORA since 1986. The Site is listed as parcel E15.2 for reference within former Fort Ord documentation review and was included in FOST 9 dated July 25, 2006. FOST 9 included Track 0 and Track 1 parcels from the Military Response Programs based on historical review and testing. The property is considered to be located within Consultation Zone for groundwater protection with an AUL.

Since the past documented impacts have been quantified and use limitations in place, they are not considered an environmental concern at the time of reporting. No documentation of violations or spills were reviewed in association with the Site.

Site Inspection

The site is vacant and undeveloped land with densely covered vegetation. Power lines are observed along the southern boundary of the property along Gigling Road. At the time of inspection, the property was marked with survey flags denoting underground utilities, and a concrete pad were observed.

9.0 CONCLUSIONS

Kimley-Horn has performed a Phase I Environmental Site Assessment (ESA) in conformance with the scope and limitations of ASTM Practice E1527-21 for the Fire Station No. 2 Site, identified as approximately 4-acre Site within northwest corner of the Gigling Road at 1st Avenue intersection apart of larger property APN: 031-151-012. Any exceptions to, or deletions from, this practice are described in Section 2.5 of this report. This assessment has revealed the following controlled recognized environmental conditions (CRECs), and/or significant data gaps in connection with the subject property.

This assessment has revealed no evidence of recognized environmental conditions (RECs) associated with the Site.

This assessment has revealed no evidence of CRECs associated with the Site except the following:

An AUL was identified in association with Site and larger APN. Limitations included notifications for the presence of contaminated groundwater, presence of munitions and explosives of concern (MEC), rare, threatened and endangered species management, and right to access land for environmental activities under a CERLA covenant. This AUL for the property is considered a CREC as there are use limitations associated with groundwater for the Site.

As addition of a groundwater well or future use of groundwater is not planned for the proposed redevelopment for the Fire Station No. 2, the CREC is not considered to impact future development. If redevelopment plans change to include groundwater wells onsite, consultation with the US EPA, DTSC and RWQCB will be required.

This assessment has revealed no evidence of Historical RECs (HRECs) associated with the Site.

In addition, the following Business Environmental Risks (BERs) were identified in association with the subject property: overhead utilities which may interfere with future redevelopment of the property.

No significant data gaps were identified during the preparation of this report, which would impact conclusions for the report; however, a user questionnaire was not returned prior to reporting, and multiple responses from agency requests were not received.

If during grading or redevelopment, evidence for soil contamination is identified such as staining or odors, the potential presence of an undocumented buried structures or piping are identified, further evaluations and soil sampling would be recommended.

9.0 DECLARATION

9.1 STATEMENT OF COMPLIANCE

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in §312.10 of 40 CFR 312 and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Environmental Professional resume(s) are included in **Appendix H**.

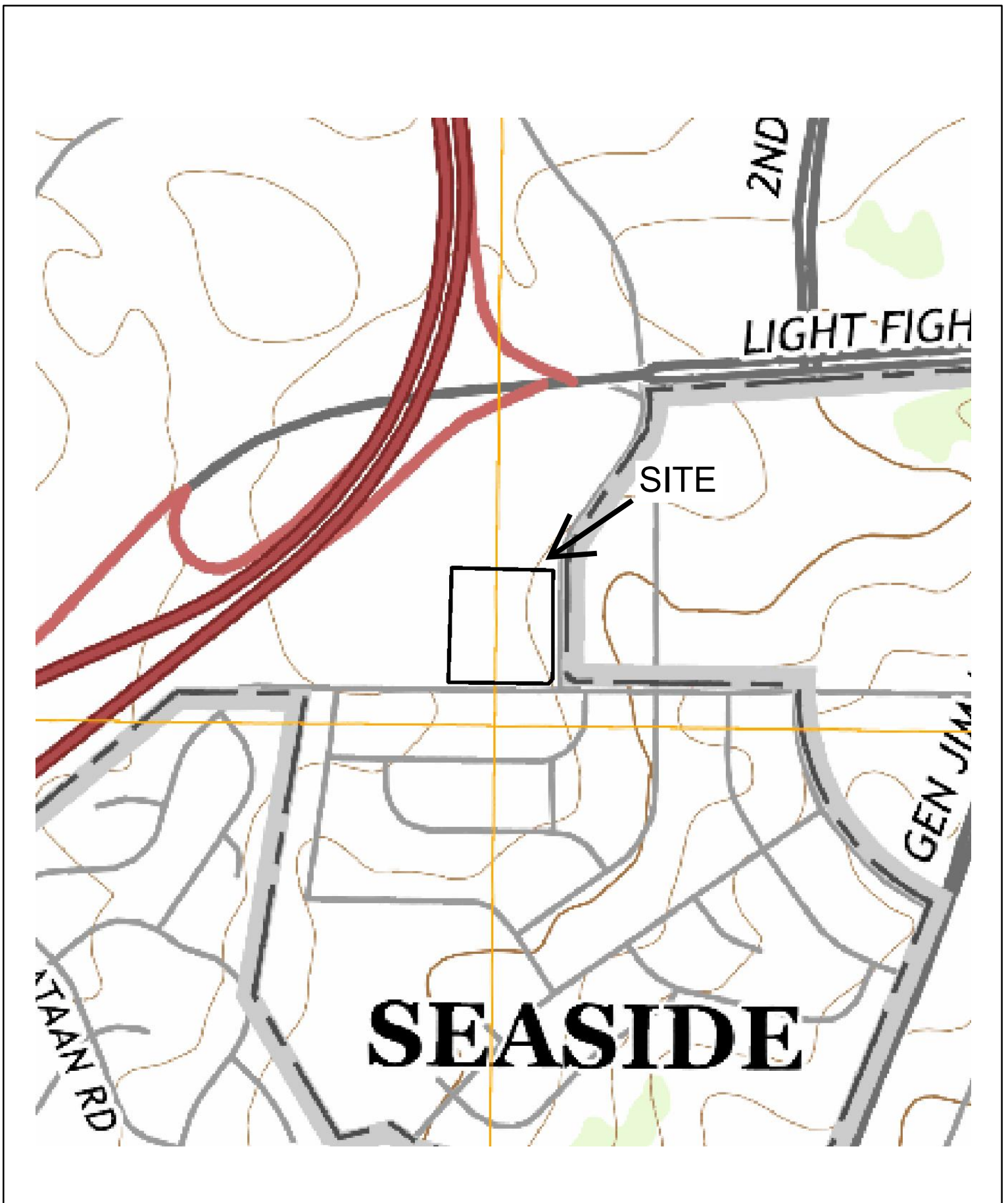


Cassie Bretschger, M.S. ENV-SP

10.0 REFERENCES

- American Society for Testing and Materials, 2021, ASTM 1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.
- American Society for Testing and Materials, 2022, ASTM E2600-15 Standard Guide for Vapor Encroachment Screening on Property Involved in Real Estate Transactions.
- Environmental Data Resources, Inc., April 2023. Environmental Reports.
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- Finding of Suitability to Transfer (FOST), Former Fort Ord, California. *Track 0 Plug-in C, Track 1 and Track 1 Plug-in Parcels*, dated July, 2005.
- Fort Ord Land Use Covenant Map, ArcGIS map. Accessed April 28, 2023. Available online: [Fort Ord Land Use Covenants \(arcgis.com\)](#)
- U.S. Department of the Army, Fort Ord Base Realignment and Closure Office. *5th Five-Year Review*. Accessed online: May 15, 2023. Available online: https://docs.fortordcleanup.com/ar_pdfs/news/Final%20FortOrd%205th5YR_FactSheet%20v3AUG21.pdf
- U.S. Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey for Monterey County, CA. Available online: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> .
- US Geological Survey (USGS). 2018. Marina, California and Seaside, California Topographic Map. 1:24,000. 7.5-minute Series.

Appendix A Figures



SITE VICINITY MAP





Appendix B Photolog



Photo 1: View of property, looking south.



Photo 2: View of property, looking north.

Kimley»Horn

1100 W. Town and Country Road, Suite 700
Orange, California 92868
Phone (714)939-1030

Site Photos

City of Seaside
Assessor Parcel Number (APN) 031-151-012



Photo 3: View of property, looking north.



Photo 4: View of property, looking east.

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Site Photos

**City of Seaside
Assessor Parcel Number (APN) 031-151-012**



Photo 5: Eastern edge of property, looking south.



Photo 6: View of larger parcel outside of the property limits.

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Site Photos

**City of Seaside
Assessor Parcel Number (APN) 031-151-012**



Photo 7: View of concrete berm, looking south.



Photo 8: View of concrete pad, looking west.

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Site Photos

**City of Seaside
Assessor Parcel Number (APN) 031-151-012**



Photo 9: View of orange flags and manhole for AT&T underground communication lines.



Photo 10: View of yellow flags for underground natural gas lines.


Appendix C

User Questionnaire

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
PROPERTY USER QUESTIONNAIRE**

Pursuant to the American Society for Testing and Materials E 1527-21 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E 1527-21), in order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001 (the “Brownfields Amendments”), the User must conduct the following inquiries. The User should provide the following information to the environmental professional. Failure to conduct these inquiries could result in a determination that “all appropriate inquiries” is not complete.

The “User” is defined in the ASTM E 1527-21 standard as *the party seeking to use Practice E 1527 to complete an environmental site assessment of the Site. A User may include, without limitation, a potential purchaser of property, a potential tenant of property, an owner of property, a lender, or a property manager.*

Site Name:	Future Fire Station No. 2 Parcel
Owner/Owner Representative Name:	Nisha Patel, Public Works Director/ City Engineer
Owner/Owner Representative Phone Number:	(831) 899-6884 (office)
Signature of Owner/Owner Representative:	
Date:	6/2/2023

Phase I ESA Questions – Please answer to the best of your knowledge. If the answer is not known, please indicate by stating “Unknown”.

1) Is the site or adjacent properties used for industrial purposes?

No.

2) Has the site or adjacent properties ever been used for industrial purposes?

No.

3) Has the site or adjacent properties been used for any of the following?

- Gas station
- Motor repair facility
- Commercial printing facility
- Drycleaner
- Photo developing lab
- Junkyard
- Landfill

- Waste treatment, storage, disposal, processing, or recycling facility
- Manufacturing facility

No.

4) Has the site been used for storage, use, or disposal of any of the following?

- Automobile fluids
- Industrial batteries
- Pesticides
- Herbicides
- Gasoline
- Diesel fuel
- Paints
- Solvents
- Hazardous chemicals

No.

5) Has the site been used for storage of industrial drums?

No.

6) Has fill dirt ever been brought to the site?

No.

7) Are there or have there ever been any pits, ponds, or lagoons on the site?

No.

8) Are there or have there been any septic system, seepage pits, cesspools, oil/water separators, interceptors, trash pits, silage pits, landing strips, or other areas of concern on the site?

No.

9) Are you aware of any floor drains at the site, especially in manufacturing or chemical use/storage areas?

No.

10) Are you aware of any past or present underground storage tanks or above ground storage tanks? If so, what were the size, contents, and removal status (if applicable).

No.

11) Are you aware of any past or present stained soils on the site?

- No.
- 12) Are you aware of any past or present vent or fill piping on the site?
- No.
- 13) Is there or have there ever been foul odors emitting from the flooring, walls, ceilings, or floor drains?
- No.
- 14) Is the property served by a well or the public water system. If so, has the water ever been found to contain contaminants in excess of government guidelines?
- No current connection. No wells onsite.
- 15) Are there any environmental liens or other environmental violations associated with the site?
- No.
- 16) Has a Phase I Environmental Site Assessment ever been performed on the site? If, so, was the site found to be contaminated with hazardous and/or petroleum substances? Was further assessment recommended?
- No.
- 17) Are you aware of any past, threatened, or pending lawsuits or government proceedings concerning releases or threatened releases of hazardous substances at the site?
- No.
- 18) Does the property discard wastewater on or adjacent to the property other than storm water to the city sewer?
- No.
- 19) Are you aware of past dumping on the site?
- No.
- 20) Are there transformers, capacitors, or other hydraulic equipment on the site that may contain PCBs?
- No.
- 21) Are you aware of any retention basins or drywells on the site?
- No.
- 22) Has the site even been used for pesticide or herbicide mixing?
- No.
- 23) Has an asbestos or lead based paint survey been performed on the site?
- No.

Appendix D
Environmental Database Information



Not Reported

Not Reported

Seaside, CA 93955

Inquiry Number: 7299418.11

April 05, 2023

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

04/05/23

Site Name:

Not Reported
Not Reported
Seaside, CA 93955
EDR Inquiry # 7299418.11

Client Name:

Kimley Horn & Associates, Inc.
401 B Street
San Diego, CA 92101
Contact: Kiana Graham



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2020	1"=500'	Flight Year: 2020	USDA/NAIP
2016	1"=500'	Flight Year: 2016	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1998	1"=500'	Acquisition Date: September 07, 1998	USGS/DOQQ
1987	1"=500'	Flight Date: June 22, 1987	USGS
1981	1"=500'	Flight Date: September 22, 1981	USDA
1974	1"=500'	Flight Date: July 18, 1974	USGS
1968	1"=500'	Flight Date: June 14, 1968	USGS
1956	1"=500'	Flight Date: May 14, 1956	USDA
1949	1"=500'	Flight Date: August 17, 1949	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

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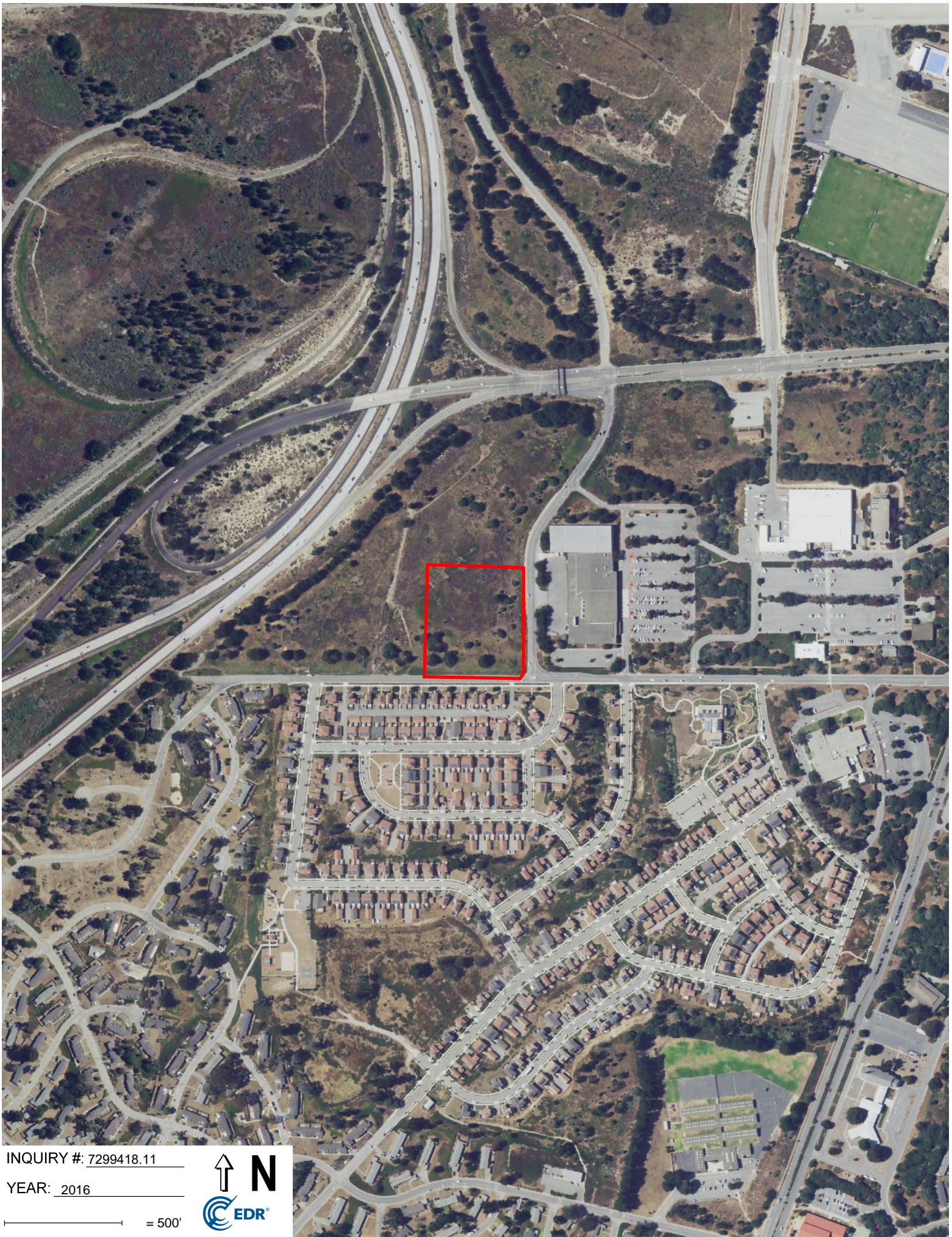


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YEAR: 2020

— = 500'





INQUIRY #: 7299418.11

YEAR: 2016

— = 500'





INQUIRY #: 7299418.11

YEAR: 2012

— = 500'





INQUIRY #: 7299418.11

YEAR: 2009

— = 500'





INQUIRY #: 7299418.11

YEAR: 2005

— = 500'





INQUIRY #: 7299418.11

YEAR: 1998

— = 500'





INQUIRY #: 7299418.11

YEAR: 1987

— = 500'





INQUIRY #: 7299418.11

YEAR: 1981

— = 500'



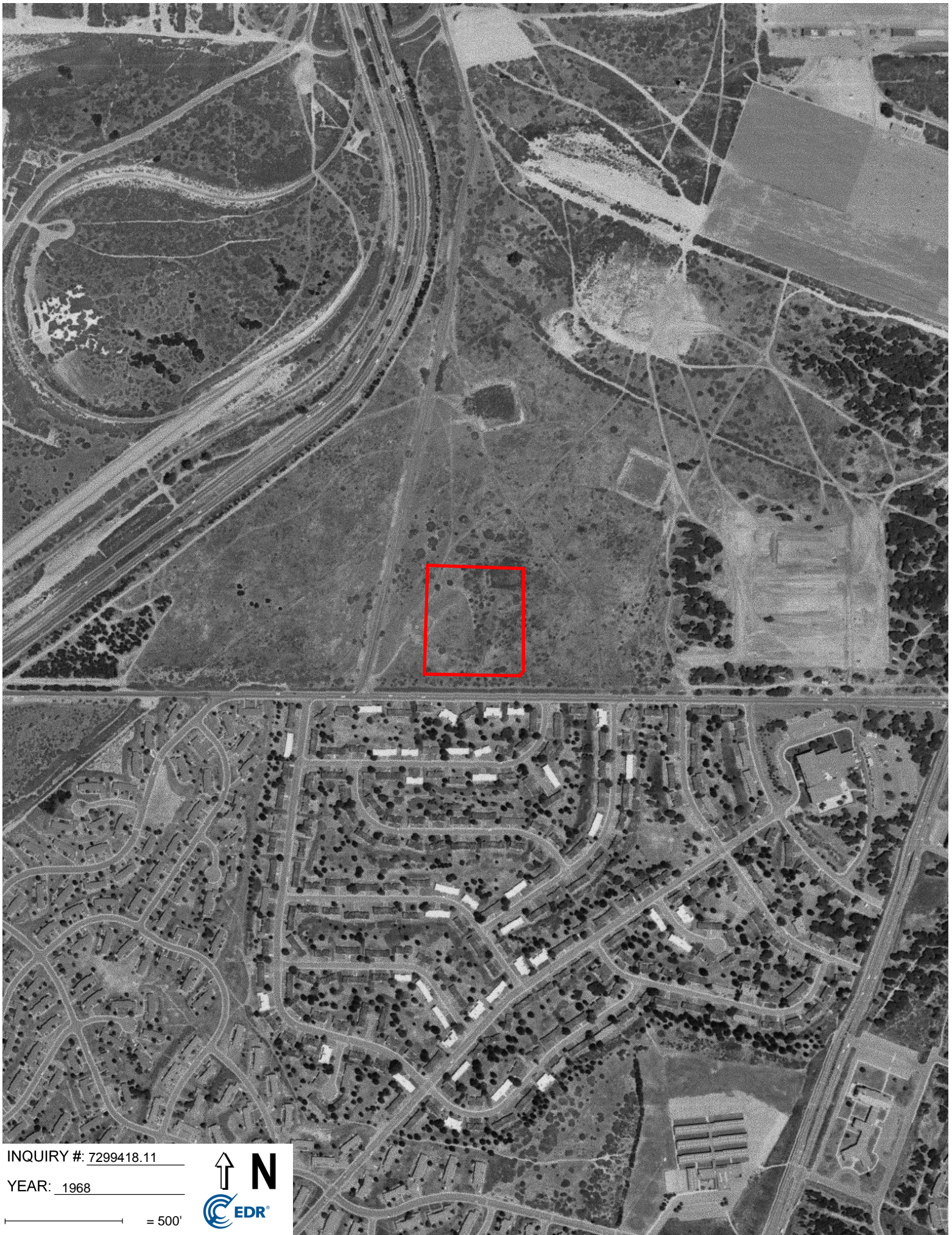


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— = 500'





INQUIRY #: 7299418.11

YEAR: 1968

— = 500'



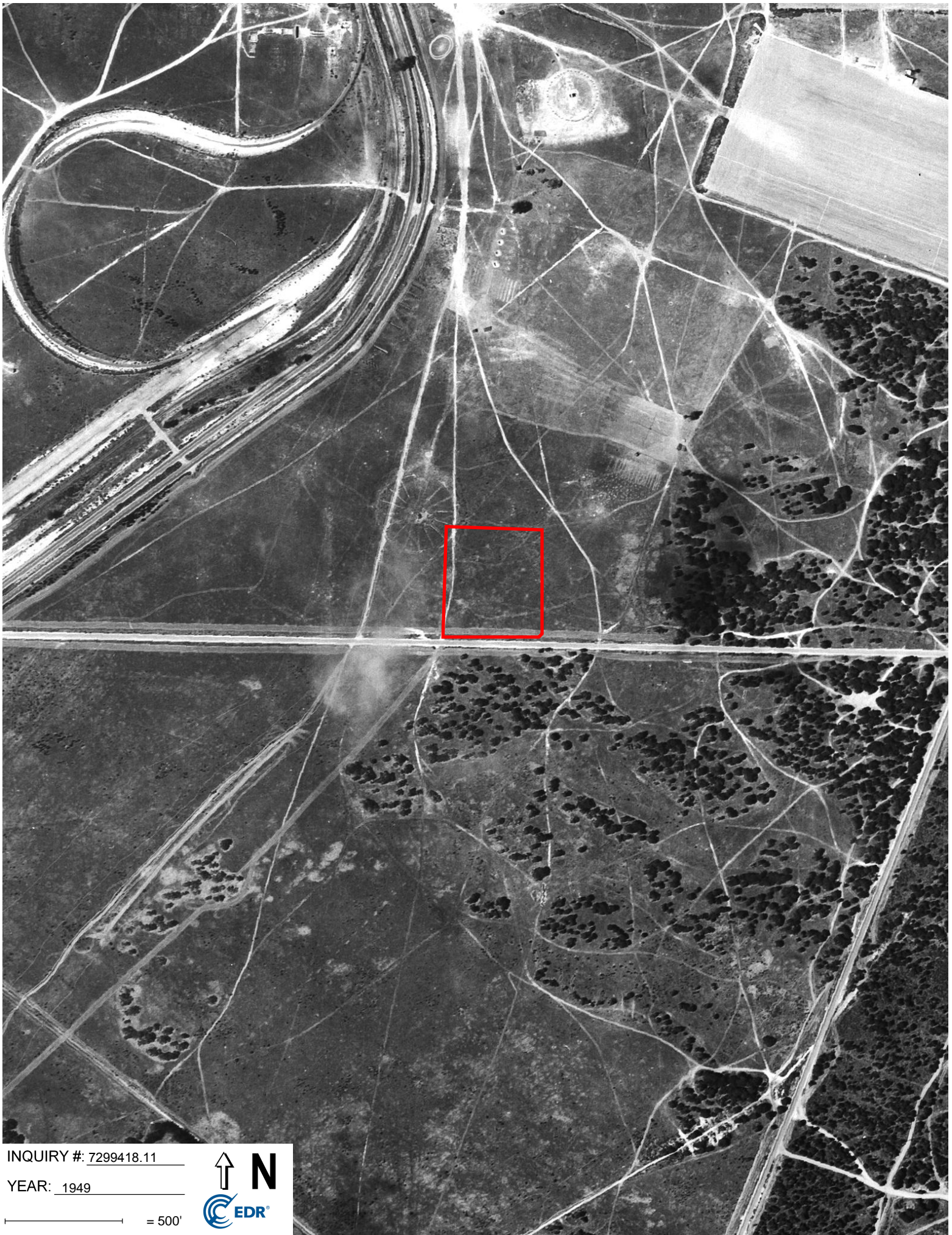


INQUIRY #: 7299418.11

YEAR: 1956

— = 500'





INQUIRY #: 7299418.11

YEAR: 1949

— = 500'



Not Reported

Not Reported

Seaside, CA 93955

Inquiry Number: 7299418.4

April 05, 2023

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

04/05/23

Site Name:

Not Reported
Not Reported
Seaside, CA 93955
EDR Inquiry # 7299418.4

Client Name:

Kimley Horn & Associates, Inc.
401 B Street
San Diego, CA 92101
Contact: Kiana Graham



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Kimley Horn & Associates, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.#	194460002.1.100	Latitude:	36.644761 36° 38' 41" North
Project:	Seaside - Phase I ESA	Longitude:	-121.814101 -121° 48' 51" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	606007.66
		UTM Y Meters:	4056120.57
		Elevation:	174.42' above sea level

Maps Provided:

2018	1941
2015	1913
2012	
1983	
1974	
1968	
1948	
1947	

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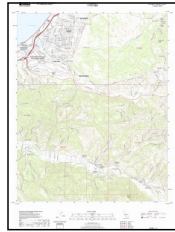
Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2018 Source Sheets



Marina
2018
7.5-minute, 24000

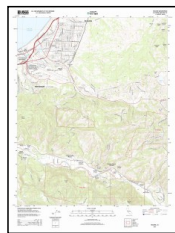


Seaside
2018
7.5-minute, 24000

2015 Source Sheets



Marina
2015
7.5-minute, 24000



Seaside
2015
7.5-minute, 24000

2012 Source Sheets



Marina
2012
7.5-minute, 24000



Seaside
2012
7.5-minute, 24000

1983 Source Sheets



Seaside
1983
7.5-minute, 24000
Aerial Photo Revised 1981



Marina
1983
7.5-minute, 24000
Aerial Photo Revised 1981

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1974 Source Sheets



Marina
1974
7.5-minute, 24000
Aerial Photo Revised 1974



Seaside
1974
7.5-minute, 24000
Aerial Photo Revised 1974

1968 Source Sheets



Marina
1968
7.5-minute, 24000
Aerial Photo Revised 1968



Seaside
1968
7.5-minute, 24000
Aerial Photo Revised 1968

1948 Source Sheets



Seaside
1948
7.5-minute, 24000
Aerial Photo Revised 1945



Marina
1948
7.5-minute, 24000
Aerial Photo Revised 1945

1947 Source Sheets



Marina
1947
7.5-minute, 24000
Aerial Photo Revised 1945



Seaside
1947
7.5-minute, 24000
Aerial Photo Revised 1945

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1941 Source Sheets

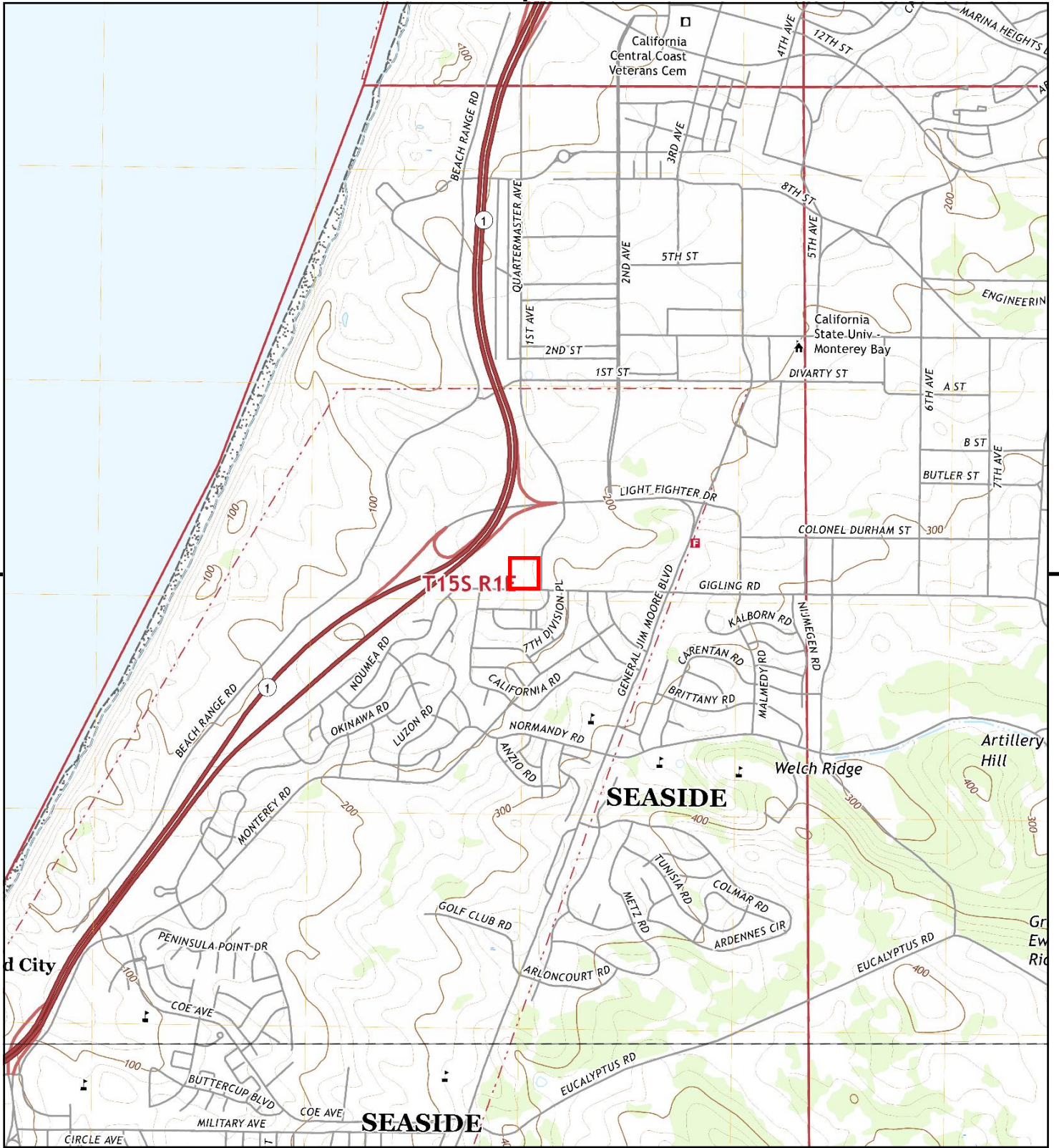


Monterey
1941
15-minute, 62500
Aerial Photo Revised 1939

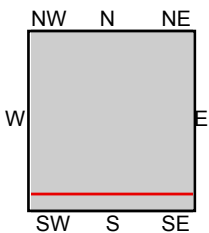
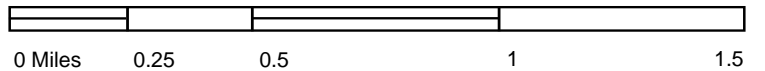
1913 Source Sheets



Monterey
1913
15-minute, 62500



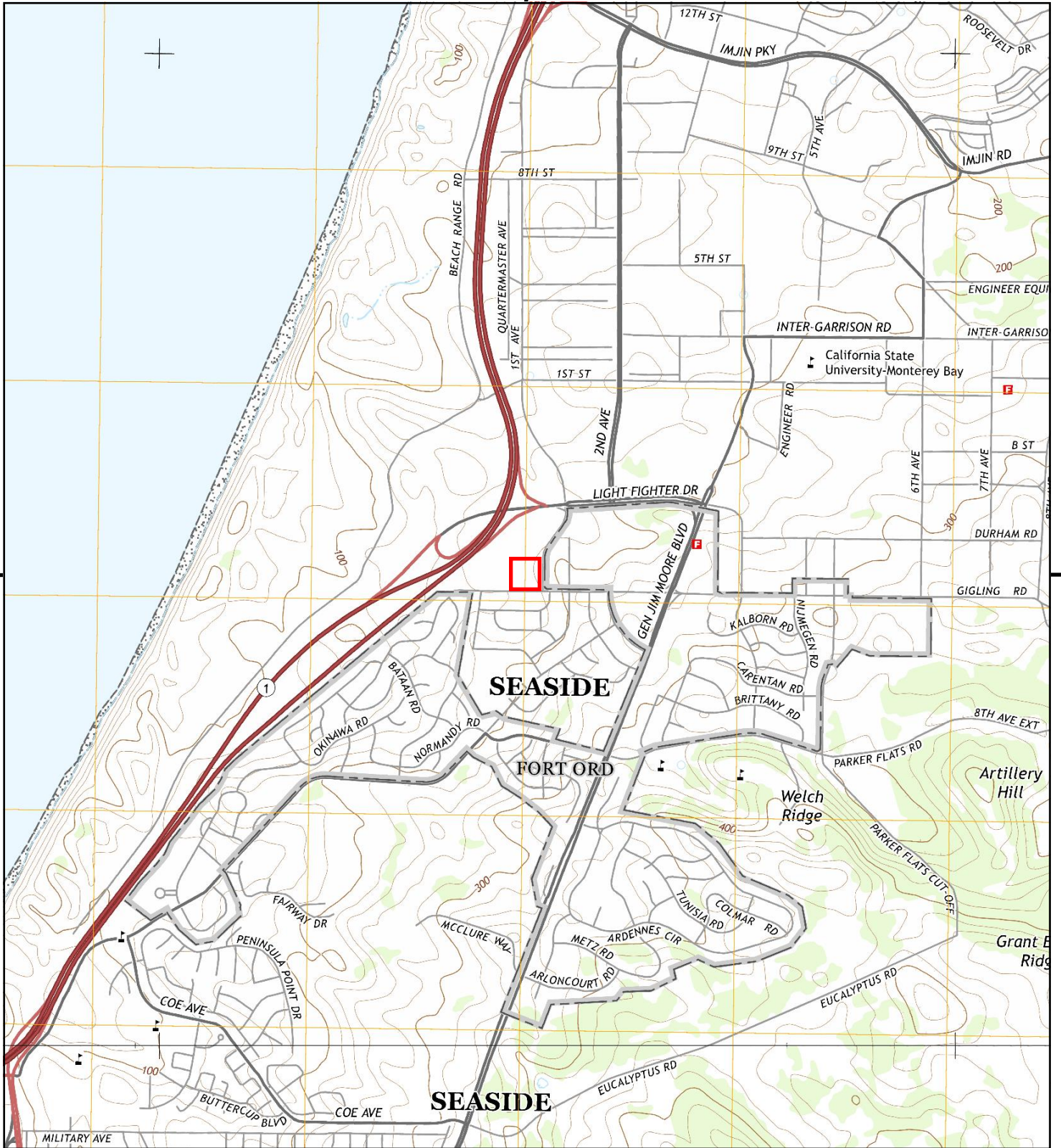
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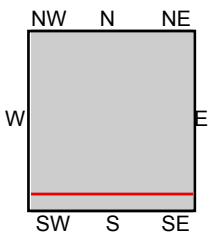
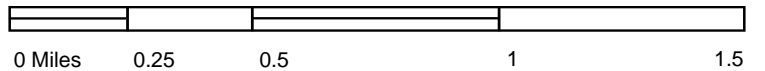
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 ADDRESS: Not Reported
 Seaside, CA 93955
 CLIENT: Kimley Horn & Associates, Inc.





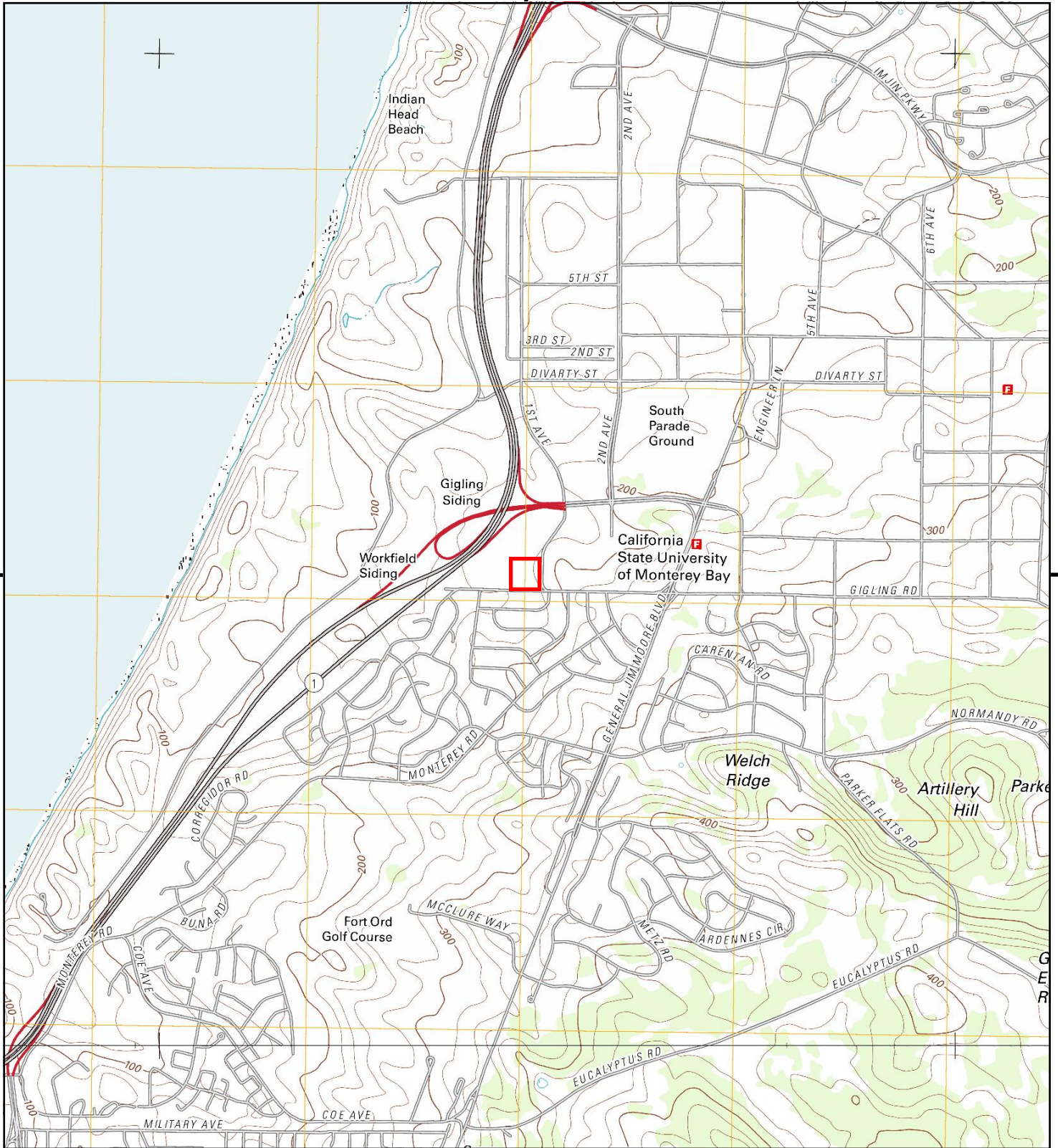
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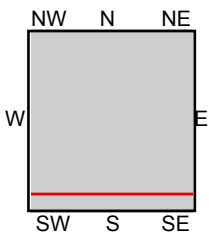
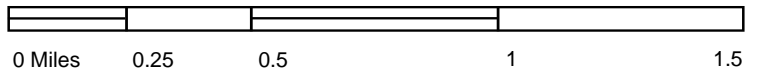
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 Seaside, CA 93955
 CLIENT: Kimley Horn & Associates, Inc.





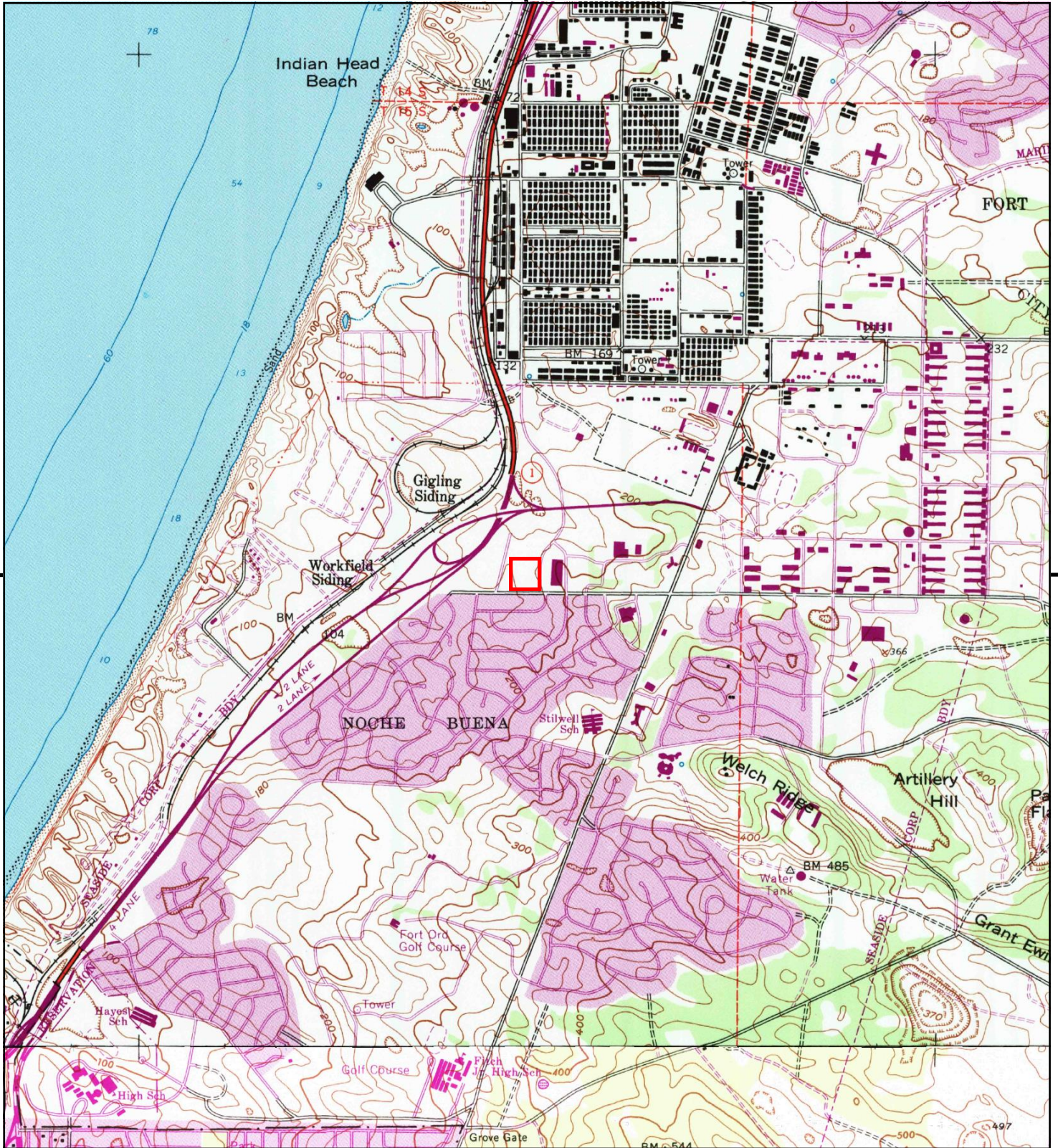
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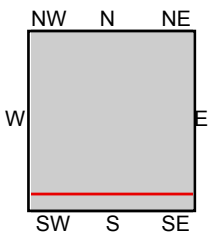
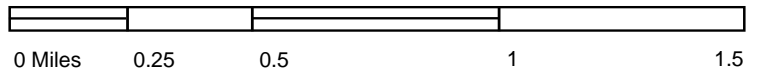
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ADDRESS: Not Reported
Seaside, CA 93955
CLIENT: Kimley Horn & Associates, Inc.





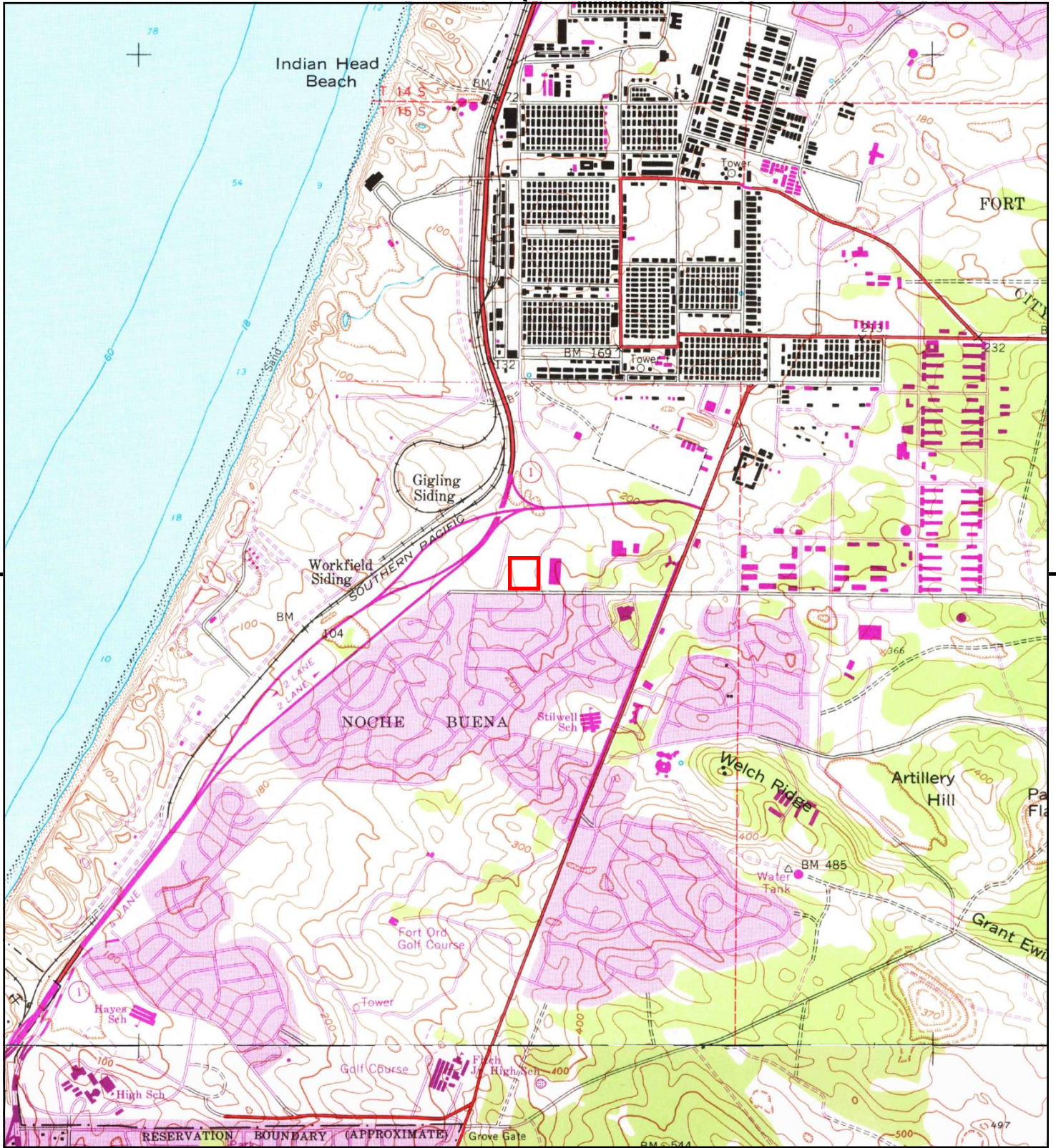
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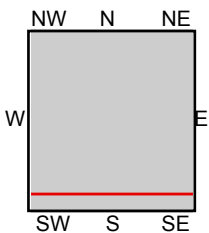
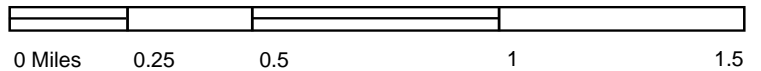
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 ADDRESS: Not Reported
 Seaside, CA 93955
 CLIENT: Kimley Horn & Associates, Inc.





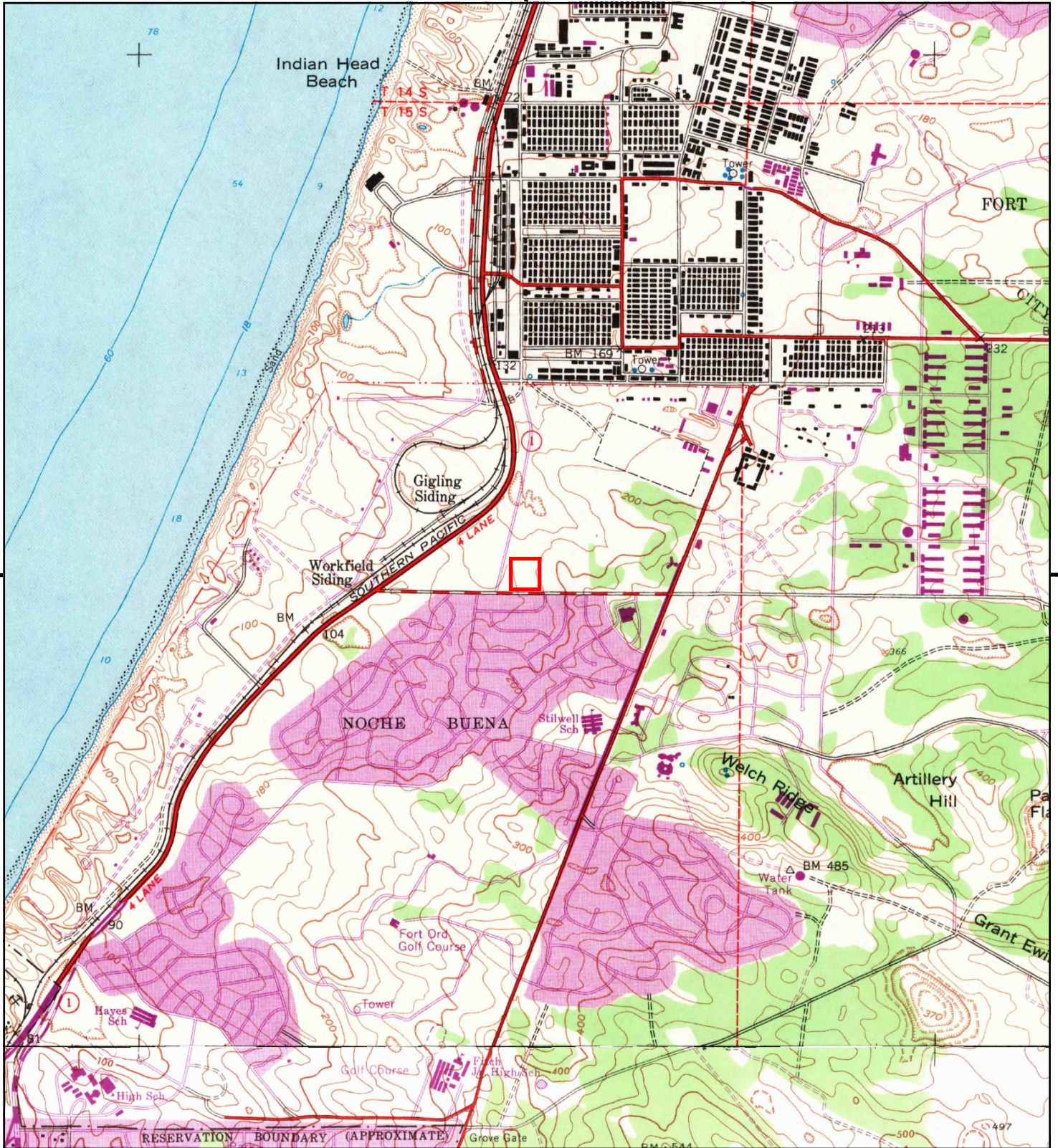
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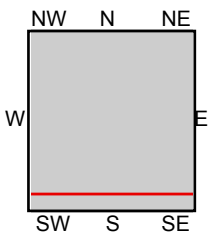
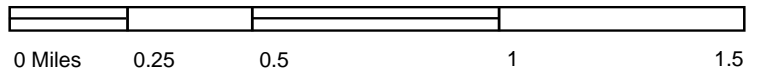
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ADDRESS: Not Reported
Seaside, CA 93955
CLIENT: Kimley Horn & Associates, Inc.





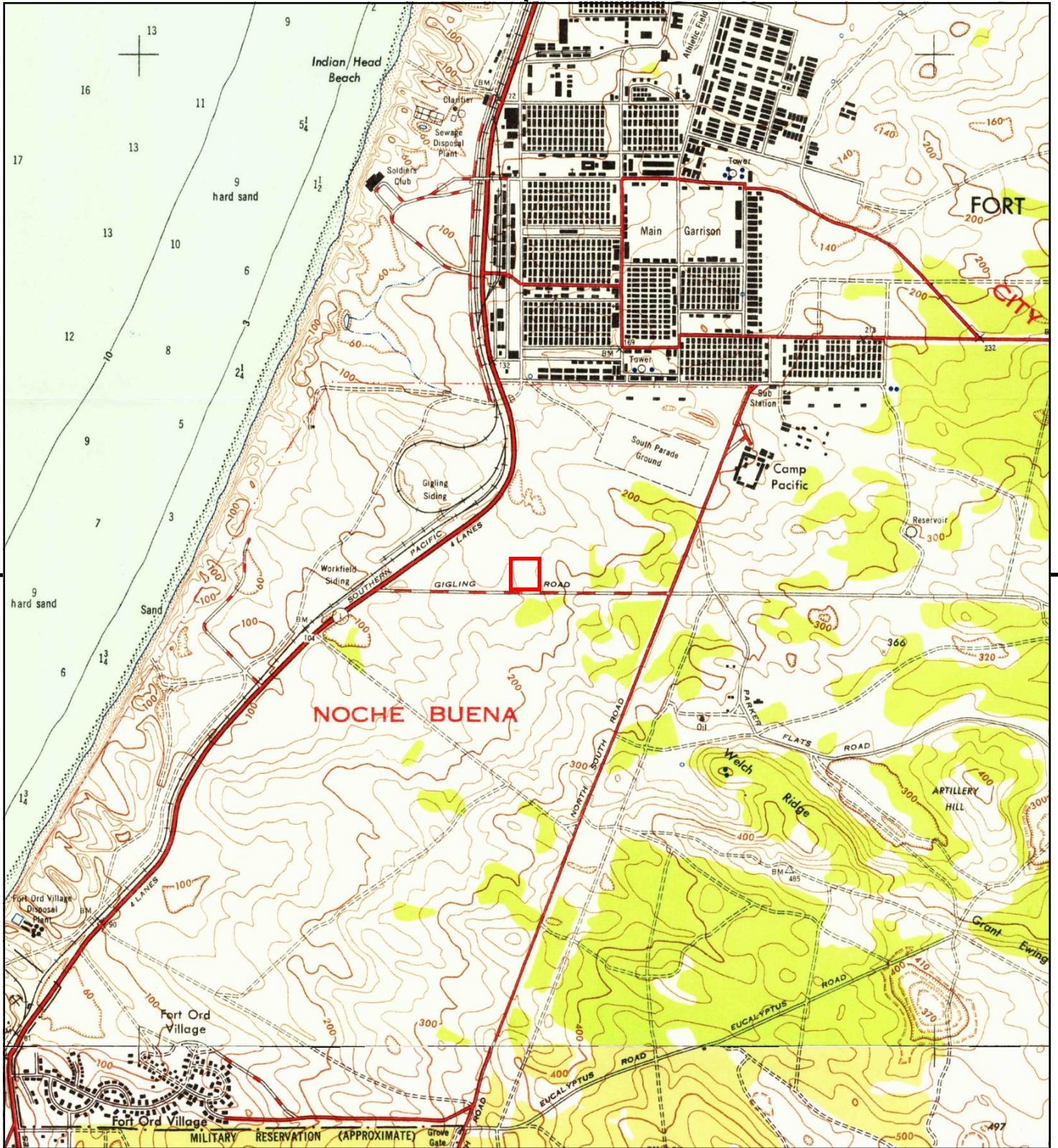
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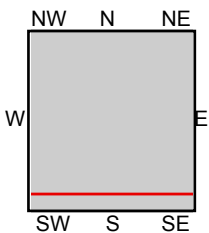
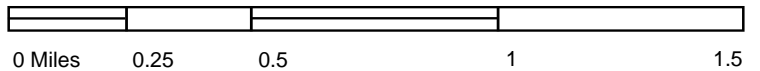
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ADDRESS: Not Reported
Seaside, CA 93955
CLIENT: Kimley Horn & Associates, Inc.





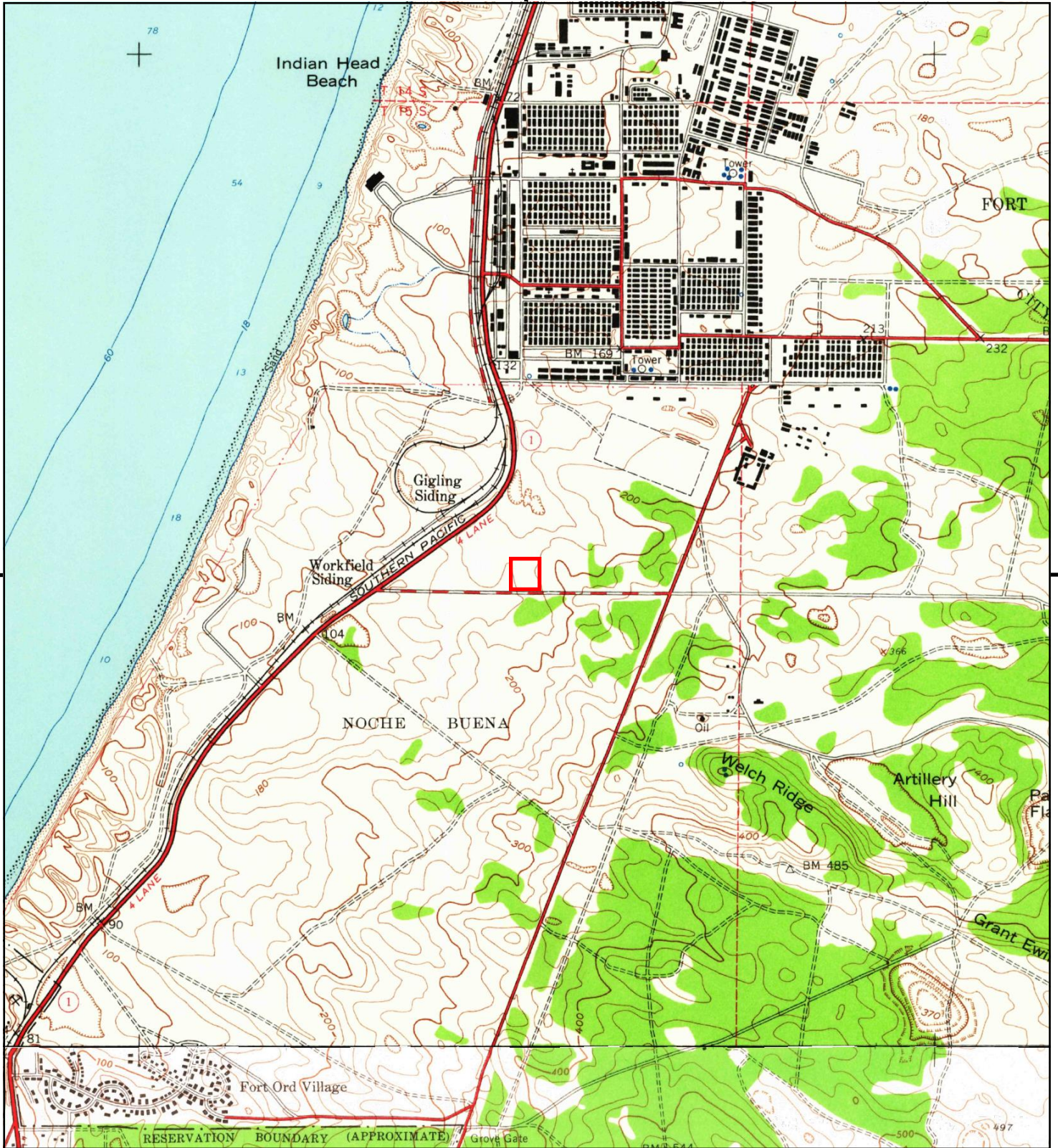
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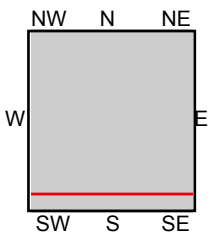
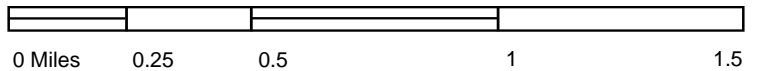
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ADDRESS: Not Reported
Seaside, CA 93955
CLIENT: Kimley Horn & Associates, Inc.





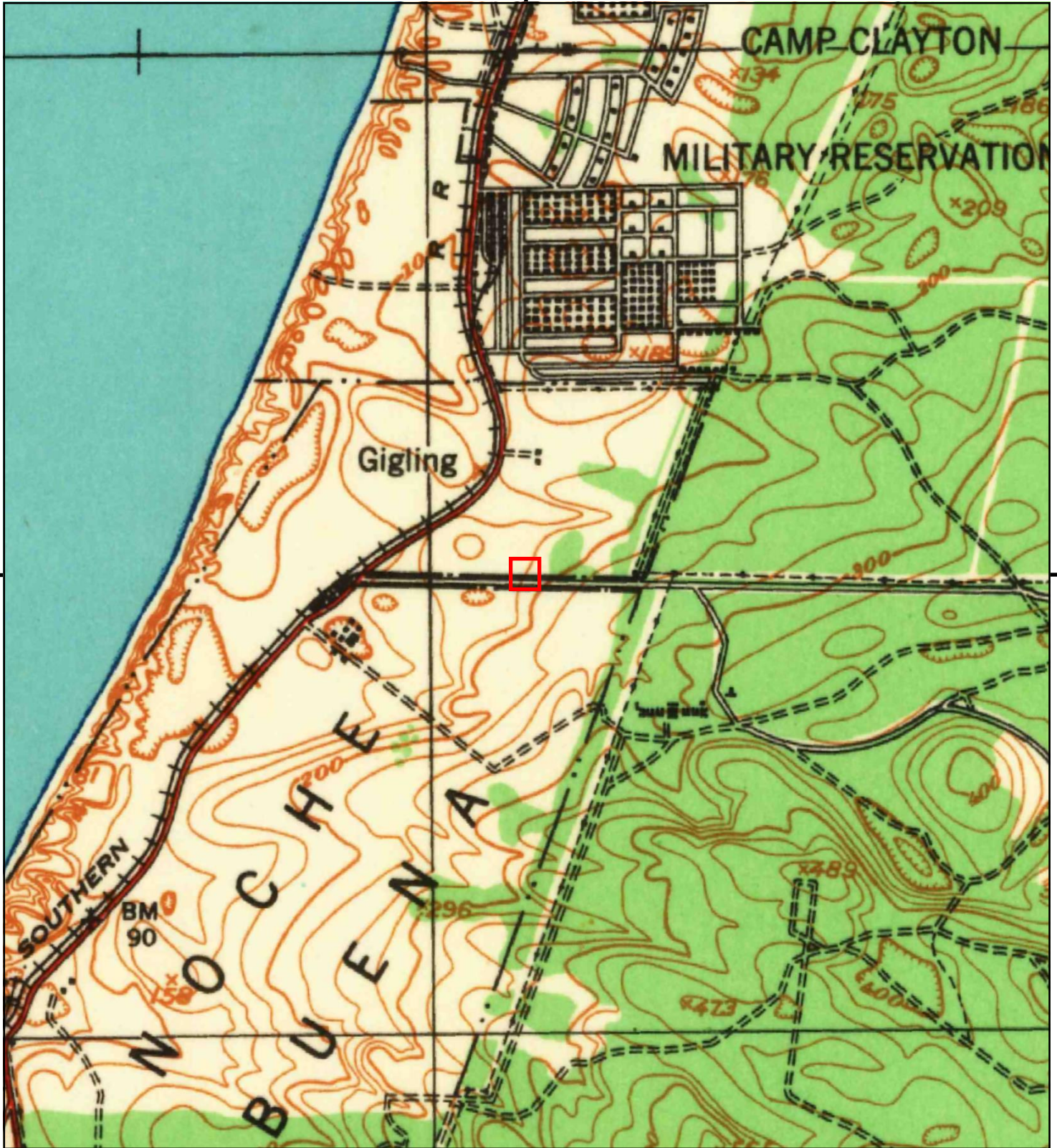
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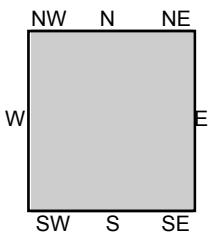
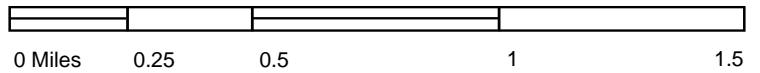
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Seaside, CA 93955
CLIENT: Kimley Horn & Associates, Inc.





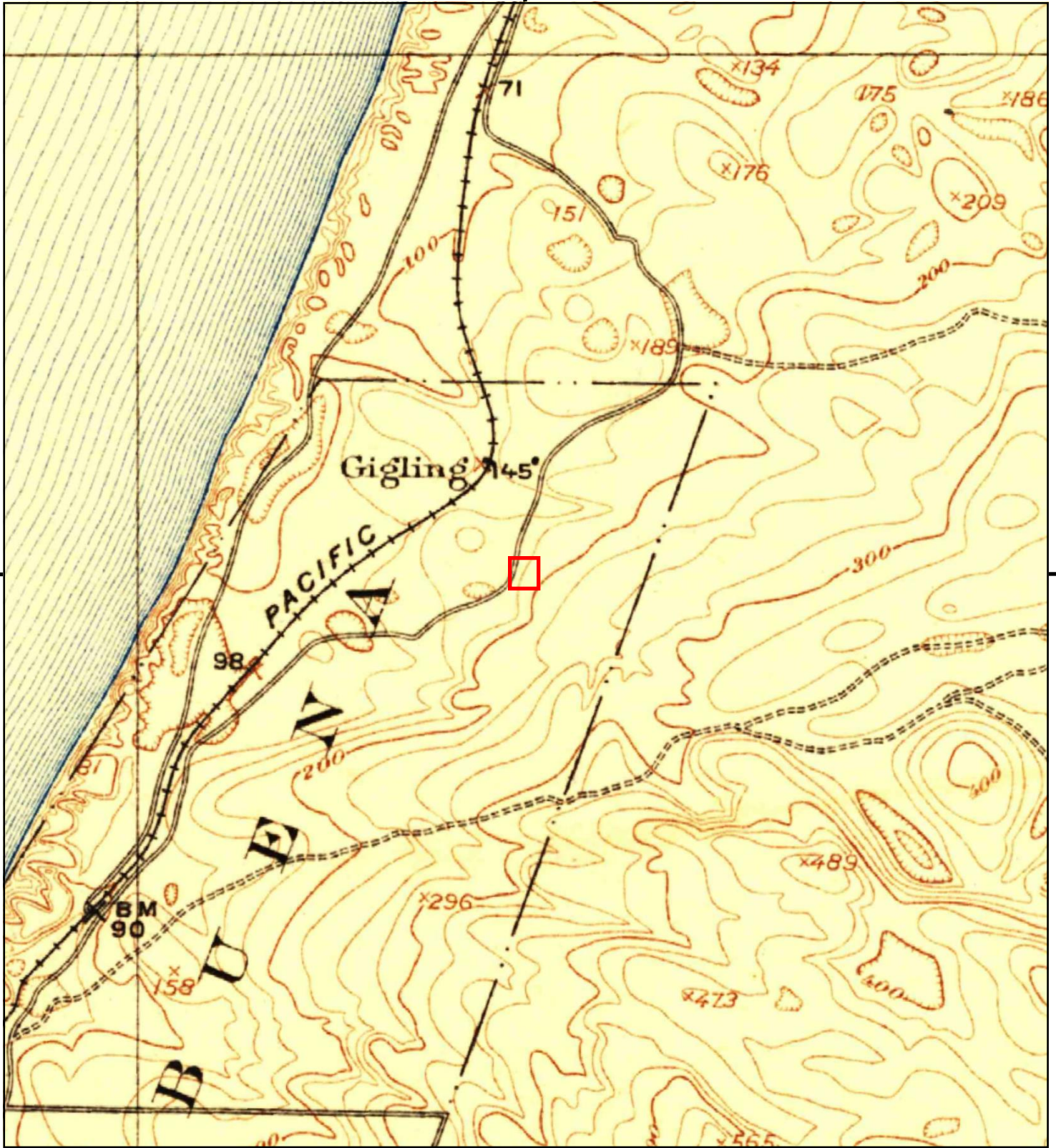
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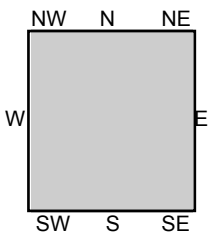
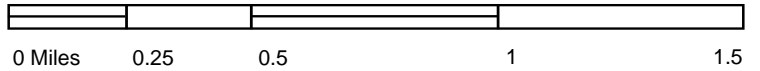
TP, Monterey, 1941, 15-minute

SITE NAME: Not Reported
 ADDRESS: Not Reported
 Seaside, CA 93955
 CLIENT: Kimley Horn & Associates, Inc.





This report includes information from the following map sheet(s).



TP, Monterey, 1913, 15-minute

SITE NAME: Not Reported
ADDRESS: Not Reported
Seaside, CA 93955
CLIENT: Kimley Horn & Associates, Inc.



Not Reported

Not Reported

Seaside, CA 93955

Inquiry Number: 7299418.3

April 05, 2023

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/05/23

Site Name:

Not Reported
Not Reported
Seaside, CA 93955
EDR Inquiry # 7299418.3

Client Name:

Kimley Horn & Associates, Inc.
401 B Street
San Diego, CA 92101
Contact: Kiana Graham



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Kimley Horn & Associates, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # A184-4D17-B58C
PO # 194460002.1.100
Project Seaside - Phase I ESA

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.



Sanborn® Library search results

Certification #: A184-4D17-B58C

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- Library of Congress
- University Publications of America
- EDR Private Collection

The Sanborn Library LLC Since 1866™

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Kimley Horn & Associates, Inc. (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

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Not Reported

Not Reported
Seaside, CA 93955

Inquiry Number: 7299418.6
April 05, 2023

The EDR Property Tax Map Report

EDR Property Tax Map Report

Environmental Data Resources, Inc.'s EDR Property Tax Map Report is designed to assist environmental professionals in evaluating potential environmental conditions on a target property by understanding property boundaries and other characteristics. The report includes a search of available property tax maps, which include information on boundaries for the target property and neighboring properties, addresses, parcel identification numbers, as well as other data typically used in property location and identification.

NO COVERAGE

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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Not Reported

Not Reported
Seaside, CA 93955

Inquiry Number: 7299418.8
April 05, 2023

EDR Building Permit Report

Target Property and Adjoining Properties

EDR Building Permit Report: Search Documentation

4/05/23

Site Name:

Not Reported
Not Reported
Seaside, CA 93955

Client Name:

Kimley Horn & Associates, Inc.
401 B Street
San Diego, CA 92101

EDR Inquiry # 7299418.8

Contact: Kiana Graham

Search Documentation

DATA GAP

The complete collection of Building Permit data available to EDR has been searched, and as of 4/05/23, EDR does not have access to building permits in the city where your target property is located (Seaside, CA).

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EDR BUILDING PERMIT REPORT

About This Report

The EDR Building Permit Report provides a practical and efficient method to search building department records for indications of environmental conditions. Generated via a search of municipal building permit records gathered from more than 1,600 cities nationwide, this report will assist you in meeting the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

Building permit data can be used to identify current and/or former operations and structures/features of environmental concern. The data can provide information on a target property and adjoining properties such as the presence of underground storage tanks, pump islands, sumps, drywells, etc., as well as information regarding water, sewer, natural gas, electrical connection dates, and current/former septic tanks.

ASTM and EPA Requirements

ASTM E 1527-13 lists building department records as a "standard historical source," as detailed in § 8.3.4.7: "Building Department Records - The term building department records means those records of the local government in which the property is located indicating permission of the local government to construct, alter, or demolish improvements on the property." ASTM also states that "Uses in the area surrounding the property shall be identified in the report, but this task is required only to the extent that this information is revealed in the course of researching the property itself."

EPA's Standards and Practices for All Appropriate Inquiries (AAI) states: "§312.24: Reviews of historical sources of information. (a) Historical documents and records must be reviewed for the purposes of achieving the objectives and performance factors of §312.20(e) and (f). Historical documents and records may include, but are not limited to, aerial photographs, fire insurance maps, building department records, chain of title documents, and land use records."

Methodology

EDR has developed the EDR Building Permit Report through our partnership with BuildFax, the nation's largest repository of building department records. BuildFax collects, updates, and manages building department records from local municipal governments. The database now includes 30 million permits, on more than 10 million properties across 1,600 cities in the United States.

The EDR Building Permit Report comprises local municipal building permit records, gathered directly from local jurisdictions, including both target property and adjoining properties. Years of coverage vary by municipality. Data reported includes (where available): date of permit, permit type, permit number, status, valuation, contractor company, contractor name, and description.

Incoming permit data is checked at seven stages in a regimented quality control process, from initial data source interview, to data preparation, through final auditing. To ensure the building department is accurate, each of the seven quality control stages contains, on average, 15 additional quality checks, resulting in a process of approximately 105 quality control "touch points."

For more information about the EDR Building Permit Report, please contact your EDR Account Executive at (800) 352-0050.



Not Reported

Not Reported
Seaside, CA 93955

Inquiry Number: 7299418.5
April 06, 2023

The EDR-City Directory Image Report

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City Directory Images

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available business directory data at approximately five year intervals.

RECORD SOURCES

The EDR City Directory Report accesses a variety of business directory sources, including Haines, InfoUSA, Polk, Cole, Bresser, and Stewart. Listings marked as EDR Digital Archive access Cole and InfoUSA records. The various directory sources enhance and complement each other to provide a more thorough and accurate report.

EDR is licensed to reproduce certain City Directory works by the copyright holders of those works. The purchaser of this EDR City Directory Report may include it in report(s) delivered to a customer.

RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

<u>Year</u>	<u>Target Street</u>	<u>Cross Street</u>	<u>Source</u>
2020	<input type="checkbox"/>	<input checked="" type="checkbox"/>	EDR Digital Archive
2017	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information
2014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information
2010	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information
2005	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information
2000	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cole Information
1995	<input type="checkbox"/>	<input type="checkbox"/>	Cole Information
1992	<input type="checkbox"/>	<input type="checkbox"/>	Cole Information
1987	<input type="checkbox"/>	<input type="checkbox"/>	Haines Criss-Cross Directory
1982	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1977	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1972	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1969	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1964	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory
1959	<input type="checkbox"/>	<input type="checkbox"/>	Polk's City Directory

FINDINGS

TARGET PROPERTY STREET

Not Reported
Seaside, CA 93955

No Addresses Found

FINDINGS

CROSS STREETS

Year

CD Image

Source

GIGLING RD

2020	pg. A1	EDR Digital Archive	
2017	pg. A2	Cole Information	
2014	pg. A3	Cole Information	
2010	pg. A4	Cole Information	
2005	pg. A5	Cole Information	
2000	pg. A6	Cole Information	
1995	-	Cole Information	Target and Adjoining not listed in Source
1992	-	Cole Information	Target and Adjoining not listed in Source
1987	-	Haines Criss-Cross Directory	Street not listed in Source
1982	-	Polk's City Directory	Street not listed in Source
1977	-	Polk's City Directory	Street not listed in Source
1972	-	Polk's City Directory	Street not listed in Source
1969	-	Polk's City Directory	Street not listed in Source
1964	-	Polk's City Directory	Street not listed in Source
1959	-	Polk's City Directory	Street not listed in Source

City Directory Images

GIGLING RD 2020

2150	BREYONNA TIREY DAVID TIREY TYRIN TIREY
2156	ALEJANDRO CEDILLO ENRIQUE CEDILLO
2200	JAMIE RIDDLE
2216	ELADIO PADILLA
4235	FURNITURE AVE INC H&R BLOCK PIZZA MY WAY SUBWAY
4240	ATM ORD COMMUNITY COMMISSARY REDBOX
4242	ATM COAST CENTRAL CREDIT UNION
4260	SEASIDE COMMUNITY CHURCH

GIGLING RD 2017

2106	HOLTMAYER, DANE
2128	RATEIKE, CLIFTON N
2144	STILLWELL, ANDREW
2150	LAWSON, CHRISTOPHER J
2168	CAMPBELL, WILLIAM B
2184	KAPAVIK, PAUL J
2216	ONEILL, BRANDON K
4235	FURNITURE AVE INC
	H&R BLOCK
	PIZZA MY WAY
4242	CENTRAL COAST FEDERAL CREDIT UNION
4260	TRICARE

GIGLING RD 2014

2106 CHAMBERLAIN, ELIZABETH B
2120 WEBBER, GERARD
2128 EAGLE, CHENG
2136 PONTIUS, BRANDON
2144 STARKEN, AUSTIN T
2150 LAWSON, CHRISTOPHER J
2156 NEAL, MANDY
2162 FLORES, LINH T
2168 GARVIN, MATTHEW B
2174 OCCUPANT UNKNOWN,
2184 OCCUPANT UNKNOWN,
2194 GOFF, JOHN T
2200 OCCUPANT UNKNOWN,
2216 ONEILL, SEAN B
4235 FURNITURE AVE INC
4242 CENTRAL COAST FEDERAL CREDIT UNION
4260 MOORE, KEVIN
TRICARE
TSR INC

GIGLING RD 2010

1150	POSTAL ANNEX
4235	DOLCE COUTURE
	EYE SOCIETY
	FURNITURE AVE INC
	GINO MORENA ENTERPRISES LLC
	H&R BLOCK
4240	AIRFORCE DELI
4242	CENTRAL COAST FEDERAL CU

Target Street

Cross Street

Source

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✓

Cole Information

GIGLING RD 2005

4242 CENTRAL COAST FEDERAL CREDIT UNION

Target Street

Cross Street

Source

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✓

Cole Information

GIGLING RD 2000

4242 CENTRAL COAST FEDERAL CREDIT UNION

Not Reported

Not Reported
Seaside, CA 93955

Inquiry Number: 7299418.7
April 06, 2023

EDR Environmental Lien and AUL Search

EDR Environmental Lien and AUL Search

The EDR Environmental Lien and AUL Search Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.

Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Environmental Lien and AUL Search

TARGET PROPERTY INFORMATION

ADDRESS

Not Reported
Not Reported
Seaside, CA 93955

RESEARCH SOURCE

Source 1:

Monterey
Monterey, CA

PROPERTY INFORMATION

Deed 1:

Type of Deed: deed
Title is vested in: Redevelop Agcy City of Seaside
Title received from: Fort Ord Reuse Auth
Deed Dated: 12/13/2006
Deed Recorded: 12/28/2006
Book: NA
Page: na
Volume: na
Instrument: na
Docket: NA
Land Record Comments:
Miscellaneous Comments:

Legal Description: See Exhibit

Legal Current Owner: Redevelop Agcy City of Seaside

Parcel # / Property Identifier: 031-151-012-000

Comments: See Exhibit

ENVIRONMENTAL LIEN

Environmental Lien: Found Not Found

OTHER ACTIVITY AND USE LIMITATIONS (AULS)

AULs: Found Not Found

If found:

1st Party: na
2nd Party: na
Dated: 12/13/2006
Recorded: 12/28/2006
Book: NA
Page: na
Docket: NA
Volume: na
Instrument: na
Comments:
Miscellaneous Comments:

Deed Exhibit 1

Stephen L. Vagnini
Monterey County Recorder
Recorded at the request of

CRMARIA
12/28/2006
8:00:00

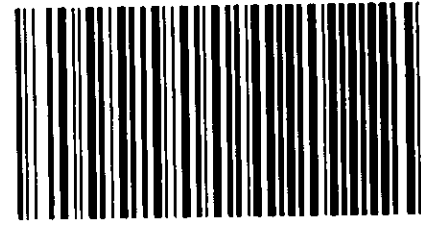
Stewart Title

WHEN RECORDED MAIL TO:

**Kutak Rock LLP
100 Connecticut Ave., N.W.
Suite 100
Washington, D.C. 200036-4374
Attn: George R. Schlossberg**

DOCUMENT: **2006113727**

Titles: 1/ Pages: 159



Fees.....
Taxes...
Other...
AMT PAID _____

THIS SPACE FOR RECORDER'S USE ONLY

Documentary Transfer Tax \$ EXEMPT—Governmental Agency

____ Computed on Full Value of Property conveyed

____ or Computed on Full Value less liens and
encumbrances remaining at time of sale.

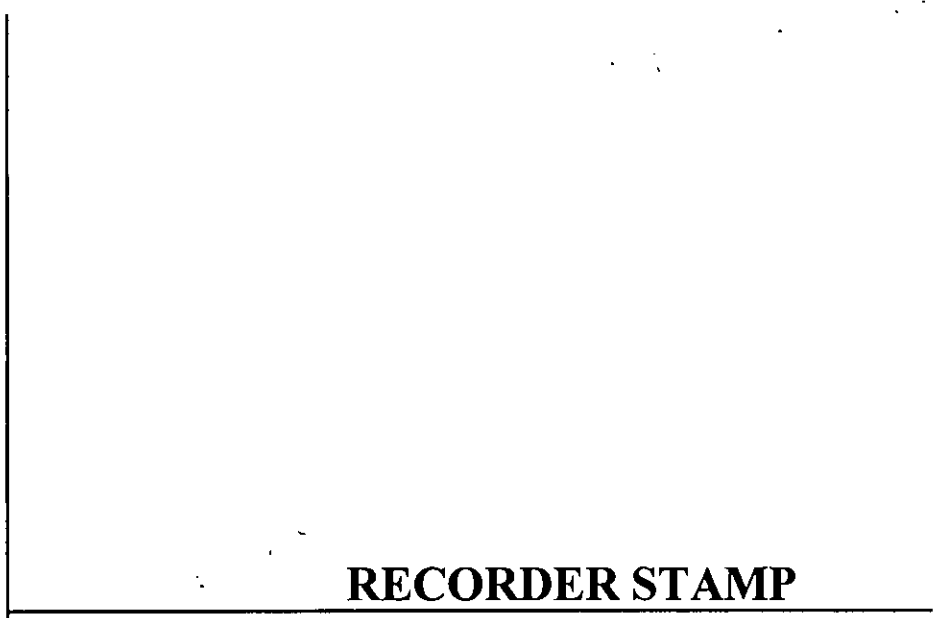
As declared by the Undersigned.

TITLE(S) OF DOCUMENT

**QUITCLAIM DEED FOR PARCELS E15.2, E20c.2.1, and L31
FORMER FORT ORD, MONTEREY, CALIFORNIA
(Fort Ord Reuse Authority to the Redevelopment Agency of the City of Seaside)**

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WHEN RECORDED RETURN TO:



**QUITCLAIM DEED FOR PARCEL E15.2, E20c.2.1, and L31
FORMER FORT ORD, MONTEREY, CALIFORNIA
(Fort Ord Reuse Authority to the Redevelopment Agency of the City of Seaside)**

THIS QUITCLAIM DEED (“Deed”) is made as of the 13th day of December 2006, among the **FORT ORD REUSE AUTHORITY (the “Grantor”)**, created under Title 7.85 of the California Government Code, Chapters 1 through 7, inclusive, commencing with Section 67650, *et seq.*, and selected provisions of the California Redevelopment Law, including Division 24 of the California Health and Safety Code, Part 1, Chapter 4.5, Article 1, commencing with Section 33492, *et seq.*, and Article 4, commencing with Section 33492.70, *et seq.*, and recognized as the Local Redevelopment Authority for the former Fort Ord Army Base, California, by the Office of Economic Adjustment on behalf of the Secretary of Defense, and the **REDEVELOPMENT AGENCY OF THE CITY OF SEASIDE (the “Grantee”)**.

WHEREAS, The United States of America (“Government”) was the owner of certain real property, improvements and other rights appurtenant thereto together with all personal property thereon, located on the former Fort Ord, Monterey County, California, which was utilized as a military installation;

WHEREAS, The military installation at Fort Ord was closed pursuant to and in accordance with the Defense Base Closure and Realignment Act of 1990, as amended (Public Law 101-510; 10 U.S.C. § 2687 note);

WHEREAS, section 2859 of the National Defense Authorization Act for Fiscal Year 1996, (Public Law 104-106), authorized the Government to sell portions of the former Fort Ord to the **Grantor** as surplus property;

WHEREAS, the **Grantor** and the Government entered into the Memorandum of Agreement Between the United States of America Acting By and Through the Secretary of the Army, United States Department of the Army and the Fort Ord Reuse Authority For the Sale of Portions of the former Fort Ord, California, dated the 20th day of June 2000, (“MOA”) and MOA

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 Amendment No. 1, dated the 23rd day of October 2001, which sets forth the specific terms and
2 conditions of the sale of portions of the former Fort Ord located in Monterey County, California;

3
4 **WHEREAS**, pursuant to the MOA, the Government conveyed the property known as
5 parcels E15.2, E20c.2.1, and L31 (“Seaside Parcels”) on the former Fort Ord by quitclaim deed to
6 the **Grantor** on _____, 2006 (“Government Deed”);
7

8 **WHEREAS**, the **Grantor** and the City of Seaside, on behalf of **Grantee**, have entered into
9 the Implementation Agreement dated May 31, 2001 and recorded in the Office of the Monterey
10 County Recorder as Document: 2001088381 (“Implementation Agreement”), which sets forth the
11 specific terms and conditions upon which the **Grantor** agrees to convey and the **Grantee** agrees to
12 accept title to the Seaside Parcels.
13

14 WITNESSETH
15

16 The **Grantor**, for and in consideration of the sum of one dollar (\$1.00) plus other good
17 and valuable consideration, the receipt and sufficiency of which are hereby acknowledged,
18 releases and quitclaims to the **Grantee**, its successors and assigns forever, all such interest, right,
19 title, and claim as the **Grantor** has in and to Parcels E15.2 (28.74 acres), E20c.2.1 (25.4 acres),
20 and L31 (11.7 acres); totaling approximately 65.84 acres (the “Property”), more particularly
21 described in Exhibit “A”, which is attached hereto and made a part hereof. The Property includes
22 the following:
23

24 A. All buildings, facilities, roadways, and other improvements, including the storm
25 drainage systems and the telephone system infrastructure, and any other improvements thereon,
26

27 B. All appurtenant easements and other rights appurtenant thereto, permits, licenses, and
28 privileges not otherwise excluded herein, and
29

30 C. All hereditaments and tenements therein and reversions, remainders, issues, profits,
31 privileges and other rights belonging or related thereto.
32

33 **Grantee** covenants for itself, its successors, and assigns and every successor in interest to
34 the Property, or any part thereof, that **Grantee** and such successors and assigns shall comply with
35 all provisions of the Implementation Agreement as if the **Grantee** were the referenced
36 Jurisdiction under the Implementation Agreement and specifically agrees to comply with the
37 Deed Restrictions and Covenants set forth in Exhibit F of the Implementation Agreement as if
38 such Deed Restrictions and Covenants were separately recorded prior to the recordation of this
39 Deed.
40

41 The Government Deed conveying the Property to the **Grantor** was recorded prior to the
42 recordation of this Deed. In its transfer of the Property to the **Grantor**, the Government provided

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 certain information regarding the environmental condition of the Property. The **Grantor** has no
2 knowledge regarding the accuracy or adequacy of such information.

3
4 The italicized information below is copied verbatim (except as discussed below) from the
5 Government deed conveying the Property to the **Grantor**. The **Grantee** hereby acknowledges
6 and assumes all responsibilities with regard to the Property placed upon the **Grantor** under the
7 terms of the aforesaid Government deed to **Grantor** and **Grantor** grants to **Grantee** all benefits
8 with regard to the Property under the terms of the aforesaid Government deed. Within the
9 italicized information only, the term "Grantor" shall mean the Government, and the term
10 "Grantee" shall mean the Fort Ord Reuse Authority ("FORA"); to avoid confusion, the words
11 "the Government" have been added in parenthesis after the word "Grantor", and "FORA" has
12 been added in parenthesis after the word "Grantee".

13
14 **II. EXCLUSIONS AND RESERVATIONS**

15
16 *This conveyance is made subject to the following **EXCLUSIONS** and*
17 **RESERVATIONS:**

18
19 *A. The Property is taken by the Grantee ("FORA") subject to any and all*
20 *valid and existing recorded outstanding liens, leases, easements, and any other*
21 *encumbrances made for the purpose of roads, streets, utility systems, rights-of-*
22 *way, pipelines, and/or covenants, exceptions, interests, liens, reservations, and*
23 *agreements of record, and any unrecorded leases, easements and any other*
24 *encumbrances made for the purpose of roads, streets, utility systems, rights-of-*
25 *way, pipelines, and/or covenants, exceptions, interests, reservations and*
26 *agreements of record between Grantor ("the Government") and other*
27 *government entities.*

28
29 *B. Grantor ("the Government") reserves a perpetual unassignable right to*
30 *enter the Property for the specific purpose of treating or removing any*
31 *unexploded shells, mines, bombs, or other such devices deposited or caused by the*
32 *Grantor ("the Government").*

33
34 *C. The reserved rights and easements set forth in this section are subject*
35 *to the following terms and conditions:*

36
37 *(1) To comply with all applicable Federal law and lawful existing*
38 *regulations;*

39
40 *(2) To allow the occupancy and use by the Grantee ("FORA"), its*
41 *successors, assigns, permittees, or lessees of any part of the easement areas not*
42 *actually occupied or required for the purpose of the full and safe utilization*
43 *thereof by the Grantor ("the Government"), so long as such occupancy and use*

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1 does not compromise the ability of the Grantor ("the Government") to use the
2 easements for their intended purposes, as set forth herein;

3
4 (3) That the easements granted shall be for the specific use
5 described and may not be construed to include the further right to authorize any
6 other use within the easements unless approved in writing by the fee holder of the
7 land subject to the easement;

8
9 (4) That any transfer of the easements by assignment, lease,
10 operating agreement, or otherwise must include language that the transferee
11 agrees to comply with and be bound by the terms and conditions of the original
12 grant;

13
14 (5) That, unless otherwise provided, no interest granted shall give
15 the Grantor ("the Government") any right to remove any material, earth, or stone
16 for consideration or other purpose except as necessary in exercising its rights
17 hereunder; and

18
19 (6) To restore any easement area so far as it is reasonably possible
20 to do so upon abandonment or release of any easement as provided herein, unless
21 this requirement is waived in writing by the then owner of the Property.

22
23 D. Grantor ("the Government") reserves mineral rights that Grantor
24 ("the Government") owns with the right of surface entry in a manner that does
25 not unreasonably interfere with Grantee's ("FORA") development and quiet
26 enjoyment of the Property.

27
28 **TO HAVE AND TO HOLD** the Property unto the Grantee ("FORA") and
29 its successors and assigns forever, provided that this Deed is made and accepted
30 upon each of the following notices, covenants, restrictions, and conditions which
31 shall be binding upon and enforceable against the Grantee ("FORA"), its
32 successors and assigns, in perpetuity, as follows:

33
34 **III. CERCLA COVENANT**

35
36 Pursuant to Section 120(h)(4)(D)(i) of the Comprehensive Environmental
37 Response, Compensation, and Liability Act of 1980 (42 U.S.C. §
38 9620(h)(4)(D)(i)), the Grantor ("the Government") has identified the Property as
39 real property on which no hazardous substances and no petroleum products or
40 their derivatives were stored for one year or more, or known to have been
41 released or disposed of. Grantor ("the Government") warrants that any response
42 action or corrective action found to be necessary after the date of this Deed
43 attributable to Grantor ("the Government") activities on the Property and/or

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1 *hazardous substances or petroleum products contamination existing on the*
2 *Property prior to the date of this Deed shall be conducted by Grantor (“the*
3 *Government”) using all reasonable means to the extent practicable to avoid*
4 *and/or minimize interference with the use of the Property. Grantee (“FORA”), its*
5 *successors and assigns, as consideration for the conveyance of the Property, to*
6 *the extent authorized by law, agree to release Grantor (“the Government”) from*
7 *any liability or responsibility arising solely out of the release of any hazardous*
8 *substance or petroleum product on the Property occurring after the date of the*
9 *delivery and acceptance of this Deed and not attributable to the activities of*
10 *Grantor (“the Government”), where such substance or product was placed on the*
11 *Property by the Grantee (“FORA”), or its successors, assigns, employees,*
12 *invitees, agents or contractors, after the conveyance. This paragraph shall not*
13 *affect the Grantor’s (“the Government”) responsibilities to conduct response*
14 *actions or corrective actions required by applicable laws, rules and regulations,*
15 *or the Grantor’s (“the Government”) indemnification obligations under*
16 *applicable laws.*

17
18 **IV. RIGHT OF ACCESS**

19
20 *A. The Grantor (“the Government”), EPA, and DTSC, and their officers,*
21 *agents, employees, contractors, and subcontractors will have the right, upon*
22 *reasonable notice to the Grantee (“FORA”), and at no cost to the Grantor (“the*
23 *Government”), to enter upon the Property in any case in which a response or*
24 *corrective action is found to be necessary, after the date of transfer of the*
25 *Property, or such access is necessary to carry out a response action or corrective*
26 *action on adjoining property, including, without limitation, the following*
27 *activities:*

28
29 *(1) To conduct investigations and surveys, including where*
30 *necessary, drilling, soil and water sampling, test-pitting, and other activities*
31 *related to the Fort Ord Installation Restoration Program (“IRP”), Military*
32 *Munitions Response Program (“MMRP”), or FFA;*

33
34 *(2) To inspect field activities of the Army and its contractors and*
35 *subcontractors with regards to implementing the Fort Ord IRP, MMRP, or FFA;*

36
37 *(3) To conduct any test or survey related to the implementation of*
38 *the IRP by the EPA or the DTSC relating to the implementation of the FFA or*
39 *environmental conditions at Fort Ord or to verify any data submitted to the EPA*
40 *or the DTSC by the Government relating to such conditions;*

41
42 *(4) To construct, operate, maintain or undertake any other*
43 *investigation, corrective measure, response, or remedial action as required or*

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 *necessary under any Fort Ord FFA, Record of Decision (“ROD”), IRP or MMRP*
2 *requirement, including, but not limited to monitoring wells, pumping wells, and*
3 *treatment facilities.*

4
5 *Such right of access shall be binding on the Grantee (“FORA”), its*
6 *successors and assigns, and shall run with the land.*

7
8 *B. In exercising this access easement, except in case of imminent*
9 *endangerment to human health or the environment, the Grantor (“the*
10 *Government”) shall give the Grantee (“FORA”), or the then record owner,*
11 *reasonable prior notice. Grantee (“FORA”) agrees that, notwithstanding any*
12 *other provisions of this Deed, the Grantor (“the Government”) assumes no*
13 *liability to the Grantee (“FORA”), its successors or assigns, or any other person,*
14 *should remediation of the Property interfere with the use of the Property. The*
15 *Grantee (“FORA”) shall not, through construction or operation/maintenance*
16 *activities, interfere with any remediation or response action conducted by the*
17 *Grantor (“the Government”) under this paragraph. The Grantee (“FORA”), the*
18 *then record owner, and any other person shall have no claim against the Grantor*
19 *(“the Government”) or any of its officers, agents, employees or contractors solely*
20 *on account of any such interference resulting from such remediation.*

21
22 *C. Without the express written consent of the Grantor (“the*
23 *Government”) in each case first obtained, neither the Grantee (“FORA”), its*
24 *successors or assigns, nor any other person or entity acting for or on behalf of the*
25 *Grantee (“FORA”), its successors or assigns, shall interfere with any response*
26 *action being taken on the Property by or on behalf of the Grantor (“the*
27 *Government”), or interrupt, relocate, or otherwise interfere with any remediation*
28 *system now or in the future located, over, through, or across any portion of the*
29 *Property.*

30
31 **V. “AS IS, WHERE IS”**

32
33 *The Property is conveyed in an “As Is, Where Is” condition without any*
34 *representation, warranty or guarantee, except as otherwise stated herein, by the*
35 *Grantor (“the Government”) as to quantity, quality, title, character, condition,*
36 *size, or kind, or that the same is in condition or fit to be used for the purpose for*
37 *which intended, and no claim for allowance or deduction upon such grounds will*
38 *be considered. There is no obligation on the part of the Grantor (“the*
39 *Government”) to make any alterations, repairs, or additions, and said Grantor*
40 *(“the Government”) shall not be liable for any latent or patent defects in the*
41 *Property. This section shall not affect the Grantor’s (“the Government”)*
42 *responsibility under **CERCLA COVENANT, ENVIRONMENTAL***
43 ***PROTECTION PROVISIONS, or any other statutory obligations as applicable.***

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

VI. ENVIRONMENTAL PROTECTION PROVISIONS

The Grantee ("FORA") shall neither transfer the Property, lease the Property, nor grant any interest, privilege, or license whatsoever in connection with the Property without the inclusion of the Environmental Protection Provisions in this Section VI ("Environmental Protection Provisions"), and shall require the inclusion of the Environmental Protection Provisions in all further deeds, easements, transfers, leases, or grant of any interest, privilege, or license.

A. FEDERAL FACILITIES AGREEMENT ("FFA")

The Grantor ("the Government") acknowledges that former Fort Ord has been identified as a National Priority List ("NPL") Site under CERCLA. The Grantee ("FORA") acknowledges that the Grantor ("the Government") has provided it with a copy of the FFA entered into by the EPA Region IX, the State of California, and the United States Department of the Army, effective on February 1990, and will provide the Grantee ("FORA") with a copy of any amendments thereto. The Grantee ("FORA") agrees that should any conflict arise between the terms of the FFA as they presently exist or may be amended, and the provisions of this Property transfer, the terms of the FFA will take precedence. The Grantee ("FORA") further agrees that notwithstanding any other provisions of the Property transfer, the Grantor ("the Government") assumes no liability to the Grantee ("FORA"), should implementation of the FFA interfere with their use of the Property. Grantor ("the Government") shall give Grantee ("FORA") reasonable notice of its action required by the FFA and use all reasonable means to the extent practicable to avoid and/or minimize interference with Grantee ("FORA")'s, its successors or assigns' use of the Property. The Grantee ("FORA"), or any subsequent transferee, shall have no claim on account of any such interference against the Grantor ("the Government") or any officer, agent, employee or contractor thereof. Grantor ("the Government") agrees to use its best efforts to the extent practicable to avoid and/or minimize interference with Grantee's ("FORA"), its successors or assigns' use of the Property, and to provide Grantee ("FORA") with a copy of any amendments to the FFA.

B. NO LIABILITY FOR NON-ARMY CONTAMINATION

The Army shall not incur liability for additional response action or corrective action found to be necessary after the date of transfer in any case in which the person or entity to whom the Property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the property.

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C. NOTICE OF THE PRESENCE OF CONTAMINATED GROUNDWATER

Applicable to Parcels E15.2 and E20c.2.1

(1) The Property is within the "Consultation Zone" of the "Special Groundwater Protection Zone." The Consultation Zone includes areas surrounding the "Prohibition Zone" where groundwater extraction may impact or be impacted by the four identified groundwater contamination plumes at the former Fort Ord. The Consultation Zone is also identified on the "Former Fort Ord Special Groundwater Protection Zone Map," which is on file with the County of Monterey (the County). County Ordinance No. 04011 requires consultation with the Grantor ("the Government"), the US EPA, the DTSC, the RWQCB and the County for proposed water well construction within the Consultation Zone.

(2) The Grantee ("FORA") covenants for itself, its successors, and assigns not to access or use groundwater underlying the Property for any purpose without the prior written approval of the Grantor ("the Government"), the US EPA, the DTSC, the RWQCB and the County. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

(3) The Grantee ("FORA") covenants for itself, its successors, and assigns that neither the Grantee ("FORA"), its successors or assigns, nor any other person or entity acting for or on behalf of the Grantee ("FORA"), its successors or assigns, shall interfere with any response action being taken on the Property by or on behalf of the Grantor ("the Government"), or interrupt, relocate, or otherwise interfere or tamper with any remediation system or monitoring wells now or in the future located on, over, through, or across any portion of the Property without the expressed written consent of the Grantor ("the Government") in each case first obtained.

(4) The Grantee ("FORA") covenants for itself, its successors, or assigns, that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee ("FORA"), its successors and assigns; shall run with the land; and are forever enforceable

E. NOTICE OF THE POTENTIAL FOR THE PRESENCE OF MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

Applicable to Parcels E15.2, E20c.2.1, and L31

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1
2 (1) *The Grantee ("FORA") is hereby notified that due to the*
3 *former use of the Property as a military installation, the Property may contain*
4 *munitions and explosives of concern (MEC). The term MEC means specific*
5 *categories of military munitions that may pose unique explosives safety risks and*
6 *includes: (1) Unexploded Ordnance (UXO), as defined in 10 U.S.C. § 101(e)(5);*
7 *(2) Discarded military munitions (DMM), as defined in 10 U.S.C. § 2710(e)(2); or*
8 *(3) Munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. § 2710(e)(3),*
9 *present in high enough concentrations to pose an explosive hazard. For the*
10 *purposes of the basewide Military Munitions Response Program (MMRP) being*
11 *conducted for the former Fort Ord and these Environmental Protection*
12 *Provisions, MEC does not include small arms ammunition .50 caliber and below.*

13
14 (2) *Portions of the Property were previously used for military*
15 *training involving military munitions, or for disposal of munitions items. A*
16 *review of existing records and available information indicates there are munitions*
17 *response sites (MRS's) associated with the Property. Military training on the*
18 *Property involved only the use of practice and pyrotechnic items that are not*
19 *designed to cause injury, or military munitions items that do not pose an explosive*
20 *hazard. Military munitions items were found within materials excavated from a*
21 *landfill disposal area formerly on the Property; however, this is attributed to*
22 *disposal activities at the landfill and not training. All landfill disposal areas*
23 *within the Property have been fully excavated, the landfilled material removed,*
24 *and the excavated areas backfilled or regraded. The ten MRS's were evaluated*
25 *and documented in the Final Track 1 Ordnance and Explosives Remedial*
26 *Investigation/Feasibility Study, former Fort Ord, California (Track 1 OE RI/FS)*
27 *(June 2004) the Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area*
28 *(May 6, 2005) and, in accordance with the Record of Decision, No Further Action*
29 *Related to Munitions and Explosives of Concern – Track 1 Sites; No Further*
30 *Remedial Action with Monitoring for Ecological Risks from Chemical*
31 *Contamination at Site 3 (MRS-22) (Track 1 ROD) (March 2005), no further*
32 *action related to MEC is required at these MRS's.*

33
34 (3) *The Grantor ("the Government") represents that, to the*
35 *best of its knowledge, no MEC is currently present on the Property.*
36 *Notwithstanding the Grantor's ("the Government") determination, the parties*
37 *acknowledge that there is a possibility that MEC may exist on the Property. If the*
38 *Grantee ("FORA"), any subsequent owner, or any other person should find any*
39 *MEC on the Property, they shall immediately stop any intrusive or ground-*
40 *disturbing work in the area or in any adjacent areas and shall not attempt to*
41 *disturb, remove or destroy it, but shall immediately notify the local law*
42 *enforcement agency having jurisdiction on the Property so that appropriate U.S.*
43 *Military explosive ordnance disposal personnel can be dispatched to address such*

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 *MEC as required under applicable law and regulations and at no expense to the*
2 *Grantee ("FORA"). The Grantee ("FORA") hereby acknowledges receipt of the*
3 *"Ordnance and Explosives Safety Alert" pamphlet.*
4

5 (4) *Because the Grantor ("the Government") cannot guarantee*
6 *that all MEC has been removed, the Grantor ("the Government") recommends*
7 *reasonable and prudent precautions be taken when conducting intrusive*
8 *operations on the Property and will, at its expense, provide construction worker*
9 *ordnance recognition and safety training. The FOST lists certain MRS's*
10 *associated with the property covered under the FOST (MRS-1, MRS-6, (and MRS-*
11 *6 Expansion Area), MRS-13A, MRS-22, MRS-27Y, MRS-49, MRS-59A, MRS-62,*
12 *and MRS-66). For those MRS's that overlap the Property the Army recommends*
13 *construction personnel involved in intrusive operations at these sites attend the*
14 *Grantor's ("the Government") ordnance recognition and safety training. To*
15 *accomplish that objective, the Grantor ("the Government") requests notice from*
16 *the Grantee ("FORA") of planned intrusive activities, and in turn will provide*
17 *ordnance recognition and safety training to construction personnel prior to the*
18 *start of intrusive work. The Grantor ("the Government") will provide ordnance*
19 *recognition and safety refresher training as appropriate. For the Track 1 sites*
20 *where ordnance recognition and safety training is recommended (MRS-1, MRS-6*
21 *(and MRS-6 Expansion Area), MRS-13A, MRS-22, MRS-27Y, MRS-49, MRS- 59A,*
22 *MRS-62, and MRS-66), at the time of the next five-year review (2007), the*
23 *Grantor ("the Government") will assess whether the education program should*
24 *continue. If information indicates that no MEC items have been found in the*
25 *course of development or redevelopment of the site, it is expected that the*
26 *education program may, with the concurrence of the regulatory agencies, be*
27 *discontinued, subject to reinstatement if a MEC item is encountered in the future.*

28 (5) *Easement and Access Rights.*
29

30 a) *The Grantor ("the Government") reserves a perpetual*
31 *and assignable right of access on, over, and through the Property, to access and*
32 *enter upon the Property in any case in which a munitions response action is found*
33 *to be necessary, or such access and entrance is necessary to carry out a munitions*
34 *response action on adjoining property as a result of the ongoing Munitions*
35 *Response Remedial Investigation/Feasibility Study. Such easement and right of*
36 *access includes, without limitation, the right to perform any additional*
37 *investigation, sampling, testing, test-pitting, surface and subsurface clearance*
38 *operations, or any other munitions response action necessary for the United*
39 *States to meet its responsibilities under applicable laws and as provided for in*
40 *this Deed. This right of access shall be binding on the Grantee ("FORA"), its*
41 *successors and assigns, and shall run with the land.*
42

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1 b) In exercising this easement and right of access, the
2 Grantor ("the Government") shall give the Grantee ("FORA") or the then record
3 owner, reasonable notice of the intent to enter on the Property, except in
4 emergency situations. Grantor ("the Government") shall use reasonable means,
5 without significant additional cost to the Grantor ("the Government"), to avoid
6 and/or minimize interference with the Grantee's ("FORA") and the Grantee's
7 ("FORA") successors' and assigns' quiet enjoyment of the Property; however,
8 the use and/or occupancy of the Property may be limited or restricted, as
9 necessary, under the following scenarios: (a) to provide the required minimum
10 separation distance employed during intrusive munitions response actions that
11 may occur on or adjacent to the Property; and (b) if Army implemented
12 prescribed burns are necessary for the purpose of a munitions response action
13 (removal) in adjacent areas. Such easement and right of access includes the right
14 to obtain and use utility services, including water, gas, electricity, sewer, and
15 communications services available on the property at a reasonable charge to the
16 United States. Excluding the reasonable charges for such utility services, no fee,
17 charge, or compensation will be due the Grantee ("FORA") or its successors and
18 assigns, for the exercise of the easement and right of access hereby retained and
19 reserved by the United States.

20
21 c) In exercising this easement and right of access, neither
22 the Grantee ("FORA") nor its successors and assigns, as the case maybe, shall
23 have any claim at law or equity against the United States or any officer,
24 employee, agent, contractor of any tier, or servant of the United States based on
25 actions taken by the United States or its officers, employees, agents, contractors
26 of any tier, or servants pursuant to and in accordance with this Paragraph. In
27 addition, the Grantee ("FORA"), its successors and assigns, shall not interfere
28 with any munitions response action conducted by the Grantor ("the
29 Government") on the Property.

30
31 (6) The Grantee ("FORA") acknowledges receipt of the Final
32 Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study
33 (Track 1 OE RI/FS) (June 2004) and the Record of Decision, No Further Action
34 Related to Munitions and Explosives of Concern – Track 1 Sites; No Further
35 Remedial Action with Monitoring for Ecological Risks from Chemical
36 Contamination at Site 3 (MRS-22) (Track 1 ROD) (March 2005).

37
38 **F. NOTICE OF RARE, THREATENED AND ENDANGERED**
39 **SPECIES MANAGEMENT**

40 *Applicable to Parcels E20c.2.1, and L31*

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1 (1) *The Property contains habitat occupied and/or potentially*
2 *occupied by several sensitive wildlife and plant species, some of which are listed*
3 *or proposed for listing as threatened or endangered under the Endangered*
4 *Species Act (ESA). Applicable laws and regulations restrict activities that involve*
5 *the potential loss of populations and habitats of listed species. To fulfill*
6 *Grantor's ("the Government") commitment in the Fort Ord Disposal and Reuse*
7 *Environmental Impact Statement Record of Decision, made in accordance with*
8 *the National Environmental Policy Act of 1969, 42 U.S.C 4321 et seq., this deed*
9 *requires the conservation in perpetuity of these sensitive wildlife and plant*
10 *species and their habitats consistent with the U.S. Fish and Wildlife Service*
11 *Biological Opinions for disposal of the former Fort Ord lands issued pursuant to*
12 *Section 7 of the ESA on March 30, 1999, October 22, 2002, and March 14, 2005*
13 *respectively. By requiring Grantee ("FORA"), and its successors and assigns to*
14 *comply with the Installation-Wide Multispecies Habitat Management Plan*
15 *(HMP), Grantor ("the Government") intends to fulfill its responsibilities under*
16 *Section 7 of the ESA and to minimize future conflicts between species protection*
17 *and economic development of portions of the Property.*

18
19 (2) *Grantee ("FORA") acknowledges that it has received a*
20 *copy of the HMP dated April 1997. The HMP, which is incorporated herein by*
21 *reference, provides a basewide framework for disposal of lands within former*
22 *Fort Ord wherein development and potential loss of species and/or habitat is*
23 *anticipated to occur in certain areas of the former Fort Ord (the HMP*
24 *Development Areas) while permanent species and habitat conservation is*
25 *guaranteed within other areas of the former Fort Ord (i.e., the HMP Reserve and*
26 *Corridor parcels). Disposal of former Fort Ord lands in accordance with and*
27 *subject to the restrictions of the HMP is intended to satisfy the Army's*
28 *responsibilities under Section 7 of the ESA.*

29
30 (3) *The following parcels of land within the Property hereby*
31 *conveyed or otherwise transferred to Grantee ("FORA") are subject to the*
32 *specific use restrictions and/or conservation, management, monitoring, and*
33 *reporting requirements identified for the parcel in the HMP:*

34
35 *a) Habitat Reserve Parcels numbered: n/a*

36
37 *b) Habitat reserves within the Development with Reserve*
38 *Areas or Development with Restrictions Parcels numbered: n/a*

39
40 (4) *Any boundary modifications to the Development with Reserve*
41 *Areas or Development with Restrictions parcels or the Borderland Development*
42 *Areas Along NRMA Interface must be approved in writing by the U. S. Fish and*

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1 *Wildlife Service (USFWS) and must maintain the viability of the HMP for*
2 *permanent species and habitat conservation.*

3
4 (5) *The HMP describes existing habitat and the likely presence*
5 *of sensitive wildlife and plant species that are treated as target species in the*
6 *HMP. Some of the target species are currently listed or proposed for listing as*
7 *threatened or endangered under the ESA. The HMP establishes general*
8 *conservation and management requirements applicable to the property to*
9 *conserve the HMP species. These requirements are intended to meet mitigation*
10 *obligations applicable to the property resulting from the Army disposal and*
11 *development reuse actions. Under the HMP, all target species are treated as if*
12 *listed under the ESA and are subject to avoidance, protection, conservation, and*
13 *restoration requirements. Grantee ("FORA") shall be responsible for*
14 *implementing and funding each of the following requirements set forth in the*
15 *HMP as applicable to the property:*

16
17 a) *Grantee ("FORA") shall implement all avoidance,*
18 *protection, conservation and restoration requirements identified in the HMP as*
19 *applicable to the Property and shall cooperate with adjacent property owners in*
20 *implementing mitigation requirements identified in the HMP for adjacent*
21 *sensitive habitat areas.*

22
23 b) *Grantee ("FORA") shall protect and conserve the HMP*
24 *target species and their habitats within the Property, and, other than those*
25 *actions required to fulfill a habitat restoration requirement applicable to the*
26 *Property, shall not remove any vegetation, cut any trees, disturb any soil, or*
27 *undertake any other actions that would impair the conservation of the species or*
28 *their habitats. Grantee ("FORA") shall accomplish the Resource Conservation*
29 *Requirements and Management Requirements identified in Chapter 4 of the HMP*
30 *as applicable to any portion of the Property.*

31
32 c) *Grantee ("FORA") shall manage, through an agency or*
33 *entity approved by USFWS, each HMP parcel, or portion thereof, within the*
34 *Property that is required in the HMP to be managed for the conservation of the*
35 *HMP species and their habitats, in accordance with the provisions of the HMP.*

36
37 d) *Grantee ("FORA") shall either directly, or indirectly*
38 *through its USFWS approved habitat manager, implement the management*
39 *guidelines applicable to the parcel through the development of a site-specific*
40 *management plan. The site-specific habitat management plan must be developed*
41 *and submitted to USFWS (and, for non-Federal recipients, California Department*
42 *of Fish and Game (CDFG) as well) for approval. Upon approval by USFWS*
43 *(and, as appropriate, CDFG) the recipient shall implement the plan. Such plans*

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 *may thereafter be modified through the Coordinated Resource Management and*
2 *Planning (CRMP) process or with the concurrence of USFWS (and, as*
3 *appropriate, CDFG) as new information or changed conditions indicate the need*
4 *for adaptive management changes.*

5
6 *e) Grantee ("FORA") shall restrict access to the Property*
7 *in accordance with the HMP, but shall allow access to the Property, upon*
8 *reasonable notice of not less than 48 hours, by USFWS, and its designated agents,*
9 *for the purpose of monitoring Grantee's ("FORA") compliance with, and for such*
10 *other purposes as are identified in the HMP.*

11
12 *f) Grantee ("FORA") shall comply with all monitoring and*
13 *reporting requirements set forth in the HMP that are applicable to the Property,*
14 *and shall provide an annual monitoring report, as provided for in the HMP, to the*
15 *Bureau of Land Management (BLM) on or before November 1 of each year, or*
16 *such other date as may be hereafter agreed to by USFWS and BLM.*

17
18 *g) Grantee ("FORA") covenants for itself, its successors*
19 *and assigns, that it shall include and otherwise make legally binding the*
20 *provisions of the HMP in any deed, lease, right of entry, or other legal instrument*
21 *by which Grantee ("FORA") divests itself of any interest in all or a portion of the*
22 *Property. The covenants, conditions, restrictions and requirements of this deed*
23 *and the provisions of the HMP shall run with the land. The covenants,*
24 *conditions, restrictions, and requirements of this deed and the HMP benefit the*
25 *lands retained by the Grantor ("the Government") that formerly comprised Fort*
26 *Ord, as well as the public generally. Management responsibility for the Property*
27 *may only be transferred as a condition of the transfer of the Property, with the*
28 *consent of the USFWS. USFWS may require the establishment of a perpetual*
29 *trust fund to pay for the management of the Property as a condition of transfer of*
30 *management responsibility from Grantee ("FORA").*

31
32 *h) This conveyance is made subject to the following*
33 **ENFORCEMENT PROVISIONS:**

34
35 *i) If Grantor ("the Government") (or its assigns),*
36 *acting through the USFWS or a successor designated agency, determines that*
37 *Grantee ("FORA") is violating or threatens to violate the provisions of*
38 *subparagraph h of this deed or the provisions of the HMP, Grantor ("the*
39 *Government") shall provide written notice to Grantee ("FORA") of such*
40 *violation and demand corrective action sufficient to cure the violation, and where*
41 *the violation involves injury to the Property resulting from any use or activity*
42 *inconsistent with the provisions of subparagraph h of this deed or the provisions*
43 *of the HMP, to restore the portion of the Property so injured. If Grantee*

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 (*“FORA”*) fails to cure a violation within sixty (60) days after receipt of notice
2 thereof from Grantor (*“the Government”*), or under circumstances where the
3 violation cannot reasonably be cured within a sixty (60) day period, or fails to
4 continue to diligently cure such violation until finally cured, Grantor (*“the*
5 *Government”*) may bring an action at law or in equity in a court of competent
6 jurisdiction to enforce the covenants, conditions, and restrictions of this deed and
7 the provisions of the HMP, to enjoin the violation, by temporary or permanent
8 injunction, to recover any damages to which it may be entitled for violation of the
9 covenants, conditions, and restrictions of this deed or the provisions of the HMP,
10 or injury to any conservation value protected by this deed or the HMP, and to
11 require the restoration of the Property to the condition that existed prior to such
12 injury. If Grantor (*“the Government”*), in its good faith and reasonable
13 discretion, determines that circumstances require immediate action to prevent or
14 mitigate significant damage to the species and habitat conservation values of the
15 Property, Grantor (*“the Government”*) may pursue its remedies under this
16 paragraph without prior notice to Grantee (*“FORA”*) or without waiting for the
17 period provided for the cure to expire. Grantor’s (*“the Government”*) rights
18 under this paragraph apply equally in the event of either actual or threatened
19 violations of covenants, conditions, reservations and restrictions of this deed or
20 the provisions of the HMP, and Grantee (*“FORA”*) acknowledges that Grantor’s
21 (*“the Government”*) remedies at law for any of said violations are inadequate
22 and Grantor (*“the Government”*) shall be entitled to the injunctive relief
23 described in this paragraph, both prohibitive and mandatory, in addition to such
24 other relief to which Grantor (*“the Government”*) may be entitled, including
25 specific performance of the covenants, conditions, reservations and restrictions of
26 this deed and the provisions of the HMP.

27
28 ii) Enforcement of the covenants, conditions, and
29 restrictions in this deed and the provisions of the HMP shall be at the discretion
30 of Grantor (*“the Government”*), and any forbearance by Grantor (*“the*
31 *Government”*) to exercise its rights under this deed and the HMP in the event of
32 any such breach or violation of any provision of this deed or the HMP by Grantee
33 (*“FORA”*) shall not be deemed or construed to be a waiver by Grantor (*“the*
34 *Government”*) of such provision or of any subsequent breach or violation of the
35 same or any other provision of this deed or the HMP or of any of Grantor’s (*“the*
36 *Government”*) rights under this deed or the HMP. No delay or omission by
37 Grantor (*“the Government”*) in the exercise of any right or remedy upon any
38 breach or violation by Grantee (*“FORA”*) shall impair such right or remedy or
39 be construed as a waiver.

40
41 iii) In addition to satisfying Army’s responsibilities
42 under Section 7 of the ESA, Grantee’s (*“FORA”*) compliance with the covenants,
43 conditions, and restrictions contained in this deed and with the provisions of the

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 *HMP are intended to satisfy mitigation obligations included in any future*
2 *incidental take permit issued by USFWS pursuant to Section 10(a)(1)(B) of the*
3 *Endangered Species Act which authorizes the incidental take of a target HMP*
4 *species on the Property. Grantee ("FORA") acknowledges that neither this deed*
5 *nor the HMP authorizes the incidental take of any species listed under the ESA.*
6 *Authorization to incidentally take any target HMP wildlife species must be*
7 *obtained by Grantee ("FORA") separately, or through participation in a broader*
8 *habitat conservation plan and Section 10(a)(1)(B) permit based on the HMP and*
9 *approved by USFWS.*
10

11 **VII. AIR NAVIGATION RESERVATION AND RESTRICTIONS**

12 *The Monterey Airport and the former Fritzsche Airfield, now known as the*
13 *Marina Municipal Airport, are in close proximity to the Property. Accordingly,*
14 *in coordination with the Federal Aviation Administration, the Grantee ("FORA")*
15 *covenants and agrees, on behalf of it, its successors and assigns and every*
16 *successor in interest to the Property herein described, or any part thereof, that,*
17 *when applicable, there will be no construction or alteration unless a*
18 *determination of no hazard to air navigation is issued by the Federal Aviation*
19 *Administration in accordance with Title 14, Code of Federal Regulations, Part*
20 *77, entitled, Objects Affecting Navigable Airspace, or under the authority of the*
21 *Federal Aviation Act of 1968, as amended.*

22 **VIII. ENFORCEMENT AND NOTICE REQUIREMENT**

23
24 *A. The provisions of this Deed benefit the governments of the United*
25 *States of America, the State of California, acting on behalf of the public in*
26 *general, and the lands retained by the Grantor ("the Government") and,*
27 *therefore, are enforceable, by the United States, the State of California, and by*
28 *the Grantee ("FORA"), and its successors and assigns. Enforcement of this Deed*
29 *shall be at the discretion of the parties entitled to enforcement hereof, and any*
30 *forbearance, delay or omission to exercise their rights under this Deed in the*
31 *event of a breach of any term of this Deed, shall not be deemed to be a waiver by*
32 *any such party of such term or of any subsequent breach of the same or any other*
33 *terms, or of any of the rights of said parties under this Deed. All remedies*
34 *available hereunder shall be in addition to any and all other remedies at law or in*
35 *equity, including CERCLA. The enforcement rights set forth in this Deed against*
36 *the Grantee ("FORA"), or its successors and assigns, shall only apply with*
37 *respect to the Property conveyed herein and held by such Grantee ("FORA"), its*
38 *successors or assigns, and only with respect to matters occurring during the*
39 *period of time such Grantee ("FORA"), its successors or assigns, owned or*
40 *occupied such Property or any portion thereof.*
41

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 *B. The obligations imposed in this section upon the successors or assigns*
2 *of Grantee ("FORA") shall only extend to the Property conveyed to any such*
3 *successor or assign.*

4
5 **IX. OTHER CONDITIONS**

6
7 *Should the Property be considered for the proposed acquisition and*
8 *construction of school properties utilizing State funding, at any time in the future,*
9 *a separate environmental review process in compliance with the California*
10 *Education Code Section 17210 et seq., will need to be conducted and approved by*
11 *DTSC.*

12
13 **X. NOTICE OF NON-DISCRIMINATION**

14
15 *With respect to activities related to the Property, the Grantee ("FORA")*
16 *covenants for itself, its successors and assigns, that the Grantee ("FORA"), and*
17 *such successors and assigns, shall not discriminate upon the basis of race, color,*
18 *religion, sex, age, handicap, or national origin in the use, occupancy, sale or*
19 *lease of the Property, or in their employment practices conducted thereon in*
20 *violation of the provisions of Title VI of the Civil Rights Act of 1964, as amended*
21 *(42 U.S.C. § 2000d); the Age Discrimination Act of 1975 (42 U.S.C. § 6102); and*
22 *the Rehabilitation Act of 1973, as amended, (29 U.S.C. § 794). The Grantor ("the*
23 *Government") shall be deemed a beneficiary of this covenant without regard to*
24 *whether it remains the owner of any land or interest therein in the vicinity of the*
25 *Property hereby conveyed, and shall have the sole right to enforce this covenant*
26 *in any court of competent jurisdiction.*

27
28 The responsibilities and obligations placed upon, and the benefits provided to, the
29 **Grantor** by the Government shall run with the land and be binding on and inure to the benefit of
30 all subsequent owners of the Property unless or until such responsibilities, obligations, or
31 benefits are released pursuant to the provisions set forth in the MOA and the Government deed.
32 **Grantee** and its successors and assigns, respectively, shall not be liable for any breach of such
33 responsibilities and obligations with regard to the Property arising from any matters or events
34 occurring after transfer of ownership of the Property by **Grantee** or its successors and assigns,
35 respectively; provided, however, that each such party shall, notwithstanding such transfer, remain
36 liable for any breach of such responsibilities and obligations to the extent caused by the fault or
37 negligence of such party.

38
39 **General Provisions:**

40
41 A. Liberal Construction. Any general rule of construction to the contrary
42 notwithstanding, this Deed shall be liberally construed to effectuate the purpose of this Deed and
43 the policy and purpose of CERCLA. If any provision of this Deed is found to be ambiguous, an

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

1 interpretation consistent with the purpose of this Deed that would render the provision valid shall
2 be favored over any interpretation that would render it invalid.

3
4 B. Severability. If any provision of this Deed, or the application of it to any person
5 or circumstance, is found to be invalid, the remainder of the provisions of this Deed, or the
6 application of such provisions to persons or circumstances other than those to which it is found
7 to be invalid, shall not be affected thereby.

8
9 C. No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of
10 title in any respect.

11
12 D. Captions. The captions in this Deed have been inserted solely for convenience of
13 reference and are not a part of this Deed and shall have no effect upon construction or
14 interpretation.

15
16 E. Right to Perform. Any right which is exercisable by the **Grantee**, and its
17 successors and assigns, to perform under this Deed may also be performed, in the event of non-
18 performance by the **Grantee**, or its successors and assigns, by a lender of the **Grantee** and its
19 successors and assigns.

20
21 The conditions, restrictions, and covenants set forth in this Deed are a binding servitude
22 on the herein conveyed Property and will be deemed to run with the land in perpetuity.
23 Restrictions, stipulations and covenants contained herein will be inserted by the **Grantee**
24 verbatim or by express reference in any deed or other legal instrument by which it divests itself
25 of either the fee simple title or any other lesser estate in the Property or any portion thereof. All
26 rights and powers reserved to the **Grantor**, and all references in this Deed to **Grantor** shall
27 include its successors in interest. The **Grantor** may agree to waive, eliminate, or reduce the
28 obligations contained in the covenants, PROVIDED, HOWEVER, that the failure of the **Grantor**
29 or its successors to insist in any one or more instances upon complete performance of any of the
30 said conditions shall not be construed as a waiver or a relinquishment of the future performance
31 of any such conditions, but the obligations of the **Grantee**, its successors and assigns, with
32 respect to such future performance shall be continued in full force and effect.

33
34 **[Signature Pages Follows]**

QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

IN WITNESS WHEREOF, the Grantor, the FORT ORD REUSE AUTHORITY, has caused these presents to be executed this 13th day of December, 2006.

THE FORT ORD REUSE AUTHORITY

By: Richard J. Houlman
EXECUTIVE
OFFICER

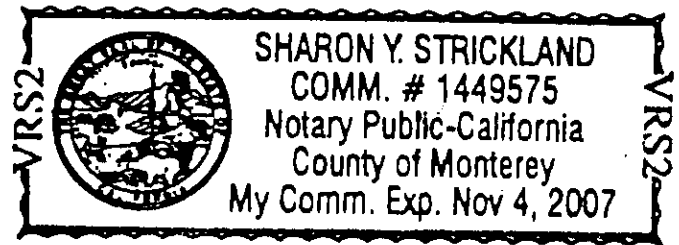
STATE OF CALIFORNIA)
) ss
COUNTY OF MONTEREY)

On 12-13-06 before me, Sharon Y. Strickland, Notary, personally appeared Michael A. Houlman, Jr.

personally know to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signatures(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the Instrument.

WITNESS my hand and official seal.

Signature Sharon Y. Strickland (Seal)



QUITCLAIM DEED FOR SEASIDE PARCELS E15.2, E20c.2.1, and L31

ACCEPTANCE:

IN WITNESS WHEREOF, the Grantee, the REDEVELOPMENT AGENCY OF THE CITY OF SEASIDE, hereby accepts and approves this Deed for itself, its successors and assigns, and agrees to all the conditions, reservations, restrictions, and terms contained therein and has caused these presents to be executed on this 14th day of DECEMBER, 2006.

REDEVELOPMENT AGENCY OF THE CITY OF SEASIDE

By [Signature] EXECUTIVE DIRECTOR

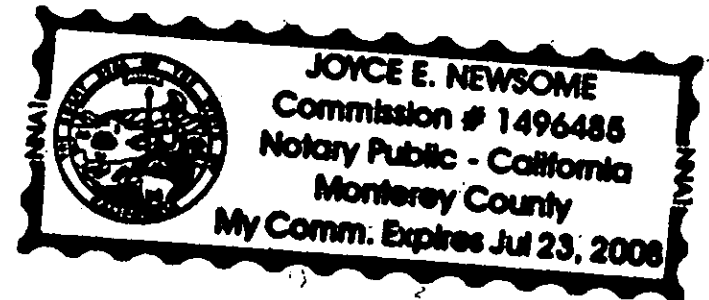
STATE OF CALIFORNIA)
)ss
COUNTY OF MONTEREY)

On 12-14-06 before me, JOYCE E. NEWSOME, Notary personally appeared

RAY CORPUZ

personally know to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s) or the entity upon behalf of which the person(s) acted, executed the Instrument.

WITNESS my hand and official seal.



Signature [Signature]

(Seal)

[Handwritten mark]

EDC Parcel E15.2
FOST 8 & 9
Fort Ord Military Reservation
City of Seaside
Monterey County, California

Legal Description of Parcel E15.2

SITUATE in a portion of the former Fort Ord Military Reservation as it is shown on that certain map recorded in Volume 19 of Surveys at Page 1, Official Records of Monterey County, being within Monterey City Lands Tract No. 1 and Rancho Noche Buena, the City of Seaside, County of Monterey, State of California; being all of "Parcel 1" 28.74 acres as it is shown on that certain map recorded in Volume 23 of Surveys at Page 93 being more particularly described as follows:

BEGINNING at an angle point on the northerly boundary line of "Seaside II", as it is shown on the map recorded in Volume 23 of Surveys at Page 93 being also a point on the south boundary line of Parcel 1 as it is shown on that certain map recorded on June 15, 2000 in Volume 23 of Surveys at Page 93, and running thence from said Point of Beginning along the southerly line of said Parcel 1

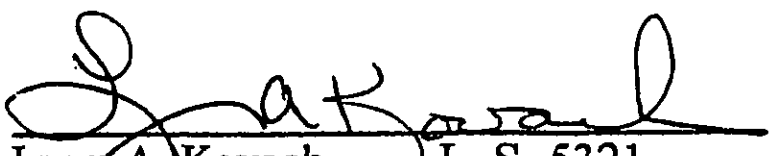
1. North 87° 33' 00" West for a distance of 1151.61 feet to an angle point in said boundary of said "Parcel 1" being also the northeasterly corner of Parcel 2 as it is shown on that certain map recorded in Volume 21 of Surveys at Page 83; thence along the common boundary line of said Parcel 2 and said "Parcel 1"
2. North 87° 33' 00" West for a distance of 544.80 feet to an angle point in said boundary of said "Parcel 1"; thence leaving the northerly boundary line of said Parcel 2
3. North 52° 03' 27" East for a distance of 561.84 feet to an angle point in said boundary of said "Parcel 1"; thence
4. North 62° 43' 31" East for a distance of 265.04 feet to an angle point in said boundary of said "Parcel 1"; thence
5. North 50° 58' 13" East for a distance of 219.31 feet to an angle point in said boundary of said "Parcel 1"; thence
6. North 38° 29' 39" East for a distance of 210.00 feet to an angle point in said boundary of said "Parcel 1"; thence
7. North 47° 58' 50" East for a distance of 424.00 feet to an angle point in said boundary of said "Parcel 1"; thence
8. North 77° 02' 10" East for a distance of 471.84 feet to an angle point in said boundary of said "Parcel 1"; thence

EDC Parcel E15.2
FOST 8 & 9
Fort Ord Military Reservation
City of Seaside
Monterey County, California

9. North 02° 00' 00" West for a distance of 42.70 feet to an angle point in said boundary of said "Parcel 1"; thence
10. North 88° 00' 00" East for a distance of 280.50 feet to an angle point in said boundary of said "Parcel 1"; thence
11. South 05° 40' 29" East for a distance of 18.97 feet to the beginning of a curve in said boundary of said "Parcel 1"; thence
12. Along a curve to the right through an angle of 43° 30' 35", having a radius of 357.00 feet, for an arc distance of 271.10 feet, and whose long chord bears South 16° 04' 48" West for a distance of 264.63 feet to a point of intersection with a tangent line; thence
13. South 37° 50' 06" West for a distance of 387.00 feet to the beginning of a curve; thence
14. Along a curve to the left through an angle of 35° 23' 06", having a radius of 268.00 feet, for an arc distance of 165.51 feet, and whose long chord bears South 20° 08' 33" West for a distance of 162.89 feet to a point of intersection with a tangent line; thence
15. South 02° 27' 00" West for a distance of 436.66 feet to the beginning of a curve; thence
16. Along a curve to the left through an angle of 90° 00' 00", having a radius of 50.00 feet, for an arc distance of 78.54 feet, and whose long chord bears South 42° 33' 00" East for a distance of 70.71 feet to a point of intersection with a non-tangential line; thence
17. South 02° 27' 00" West a distance of 63.99 feet to the POINT OF BEGINNING.

Containing an area of 28.740 acres, more or less.

This legal description was prepared by


Lynn A. Kovach L. S. 5321
My license expires December 31, 2005

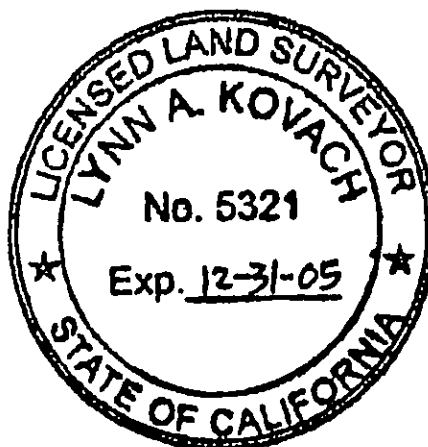
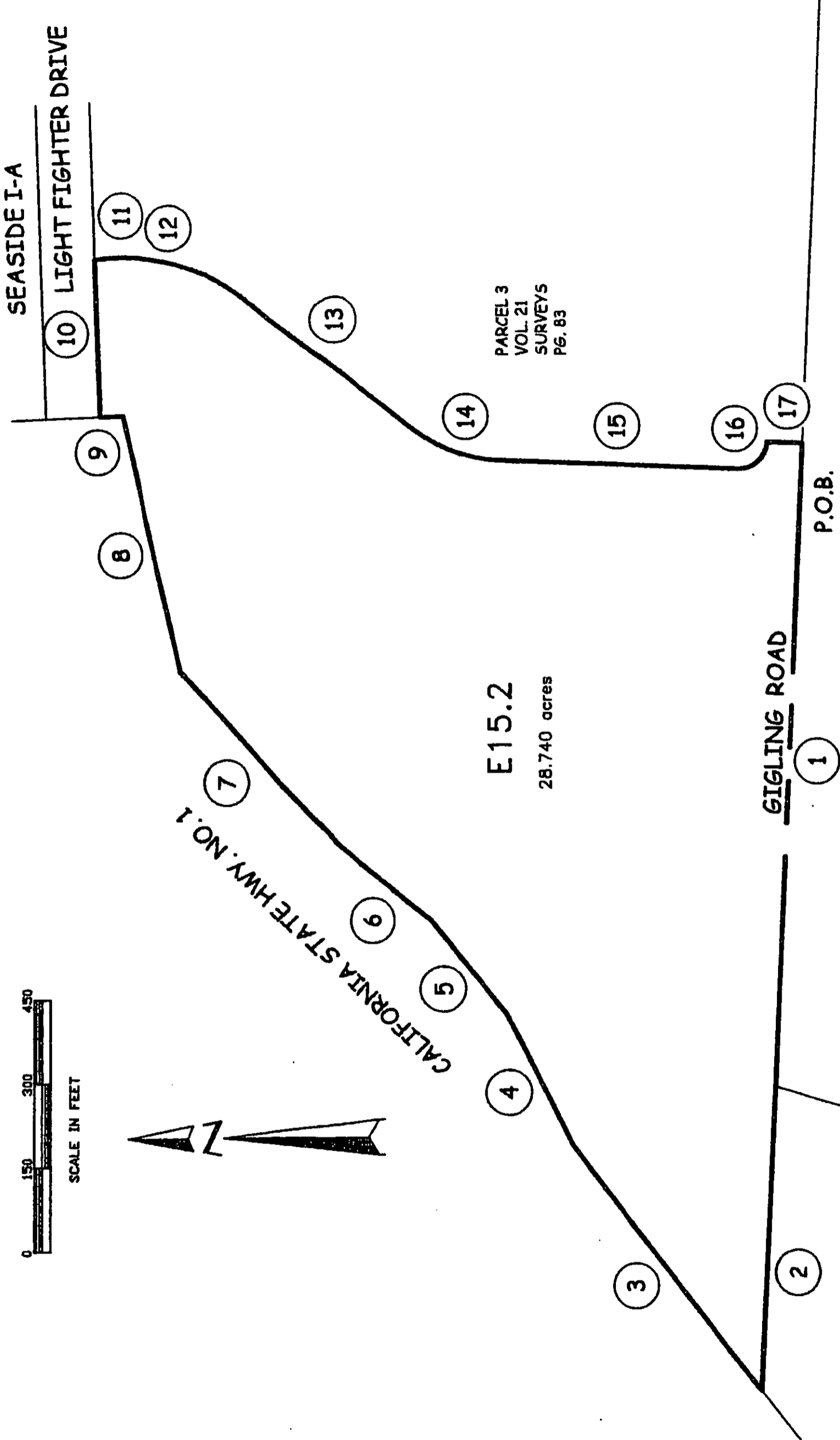


Exhibit 'A'



Note: Course Numbers Refer to the Legal Description

EXHIBIT OF

PARCEL E15.2
Seaside Jurisdiction, Fort Ord, FOST 9 EDC
Lying within "Seaside I-B"

as shown on Vol. 23 of Surveys at Page 93
Being also within Fort Ord Military Reservation and Monterey City Lands Tract No. 1
Monterey County, California

EDC Parcel L31 and E20c.2.1
FOST 8 & 9
Fort Ord Military Reservation
City of Seaside
Monterey County, California

Legal Description of Parcel 1

SITUATE in a portion of the former Fort Ord Military Reservation as it is shown on that certain map entitled "Seaside IV-A" recorded on June 15, 2000 in Volume 23 of Surveys at Page 99, Official Records of Monterey County, being within Monterey City Lands Tract No. 1, the City of Seaside, County of Monterey, State of California; being more particularly described as follows:

BEGINNING at the most westerly point on the common boundary of Parcel 1 as it is shown on said map of "Seaside IV-A" and Parcel 2 as it is shown on the map recorded in Volume 19 of Surveys at Page 22, Official Records of Monterey County, and running thence from said Point of Beginning along said common boundary

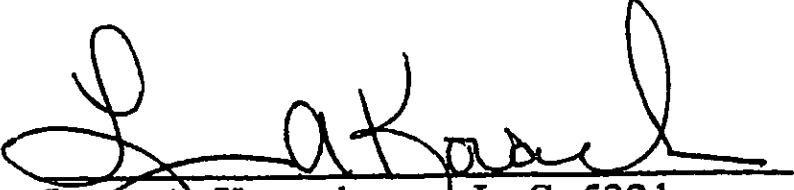
1. South 76° 00' 00" East for a distance of 642.29 feet to a point on said common boundary line; thence
2. South 61° 30' 00" East for a distance of 394.18 feet to a point on said common boundary line; thence
3. North 30° 00' 00" East for a distance of 272.25 feet to a point on said common boundary line at the most easterly corner of said Parcel 2 being also a point on the common boundary line of Parcel 1 as it is shown on the map recorded in Volume 19 of Surveys at Page 22; thence along the southerly boundary line of said Parcel 1 as it is shown on the map recorded in Volume 19 of Surveys at Page 22
4. South 53° 30' 00" East for a distance of 1898.00 feet to the most southerly point of said Parcel 1 as it is shown on the map recorded in Volume 19 of Surveys at Page 22; thence leaving said boundary of said Parcel 1
5. South 01° 00' 07" West for a distance of 180.36 feet to a point on a line; thence
6. South 80° 45' 00" West for a distance of 304.19 feet to a point on a line; thence
7. South 09° 15' 00" East for a distance of 19.48 feet to a point on a line; thence
8. North 74° 02' 25" West for a distance of 56.29 feet to a point on a line; thence
9. North 82° 34' 10" West for a distance of 100.13 feet to a point on a line; thence
10. North 75° 32' 45" West for a distance of 74.45 feet to a point on a line; thence

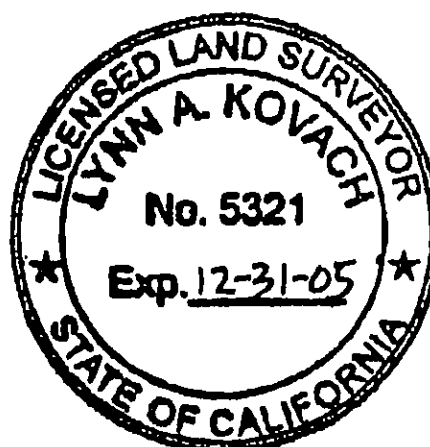
EDC Parcel L31 and E20c.2.1
FOST 8 & 9
Fort Ord Military Reservation
City of Seaside
Monterey County, California

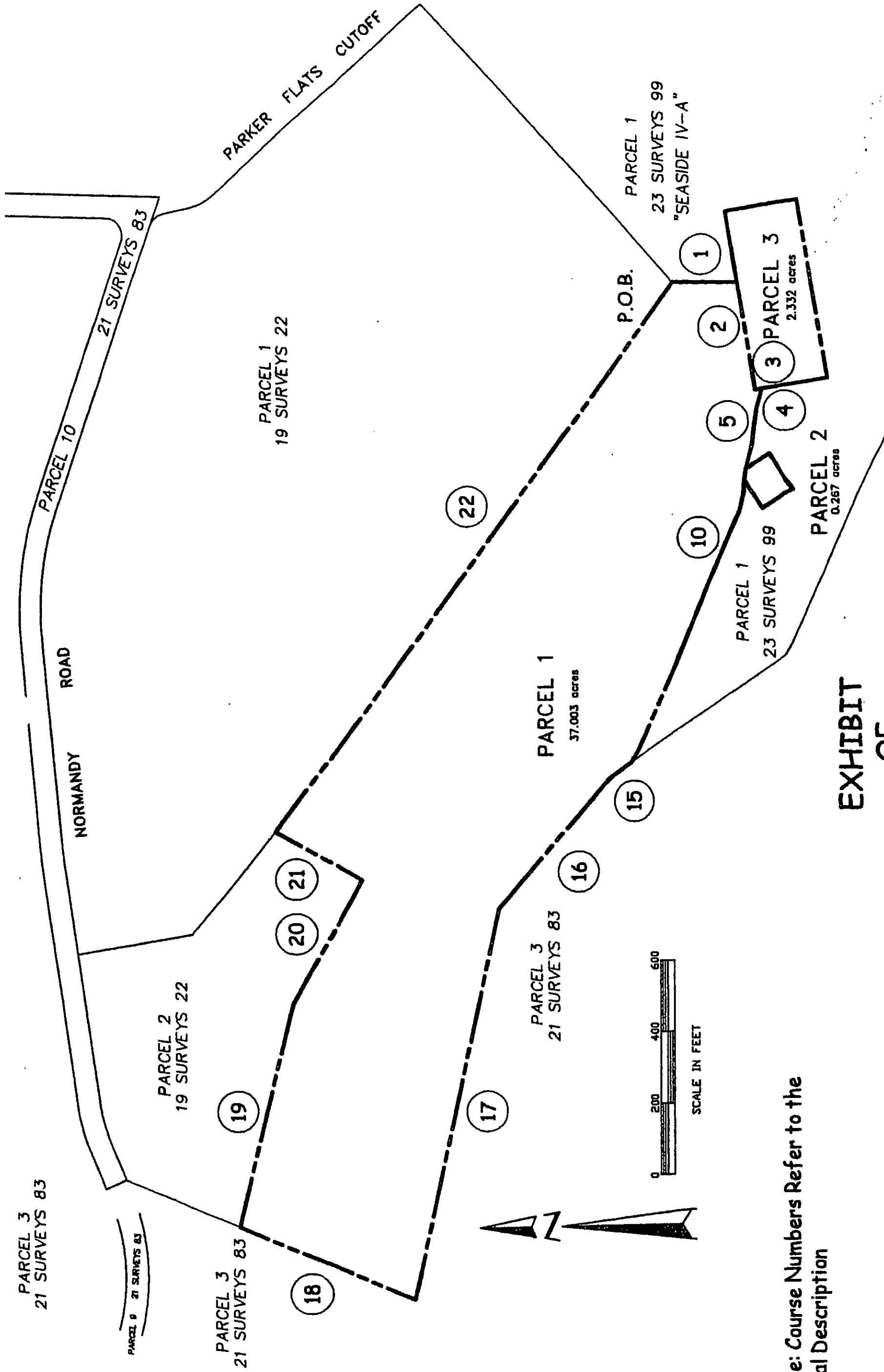
11. North 81° 53' 44" West for a distance of 31.67 feet to a point on a line; thence
12. North 86° 34' 34" West for a distance of 37.14 feet to a point on a line; thence
13. North 76° 20' 31" West for a distance of 51.91 feet to a point on a line; thence
14. North 66° 31' 44" West for a distance of 211.49 feet to a point on a line; thence
15. North 67° 15' 06" West for a distance of 161.61 feet to a point on a line; thence
16. North 68° 51' 20" West for a distance of 92.18 feet to a point on a line; thence
17. North 65° 40' 36" West for a distance of 257.89 feet to a point on a line; thence
18. North 57° 38' 22" West for a distance of 43.67 feet to a point on the southwesterly boundary line of said of Parcel 1 as it is shown on said map of "Seaside IV-A"; thence northwesterly along said boundary line
19. North 34° 04' 26" West for a distance of 73.00 feet to a point on said boundary line; thence
20. North 48° 33' 43" West for a distance of 482.33 feet to a point on said boundary line; thence
21. North 77° 42' 40" West for a distance of 1116.99 feet to a point on said boundary line; thence
22. North 22° 54' 16" East for a distance of 534.30 feet to the POINT OF BEGINNING.

Containing an area of 37.003 acres, more or less.

This legal description was prepared by


Lynn A. Kovach L. S. 5321
My license expires December 31, 2005





Note: Course Numbers Refer to the Legal Description

**EXHIBIT
OF**

**PARCEL 1 - PARCELS L31 and E20c.2.1
Seaside Jurisdiction, Fort Ord, FOST 8 & 9 EDC**

Lying within "Seaside IV-A"

as shown on Vol. 23 of Surveys at Page 99

Being also within Fort Ord Military Reservation and Monterey City Lands Tract No. 1
Monterey County, California

**FINDING OF SUITABILITY TO TRANSFER
(FOST)**

FORMER FORT ORD, CALIFORNIA

**TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1
PLUG-IN PARCELS**

August 2005

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**FINDING OF SUITABILITY TO TRANSFER (FOST)
FORMER FORT ORD, CALIFORNIA
TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1 PLUG-IN PARCELS**

July 2005

1.0 PURPOSE

The purpose of this Finding of Suitability to Transfer (FOST) is to document the environmental suitability of certain parcels or property (the Property) at the former Fort Ord, California, for transfer to the Fort Ord Reuse Authority (FORA), Monterey County, Monterey Peninsula College (MPC), the Veterans Transition Center, California Department of Parks & Recreation and California Department of Transportation (Caltrans) consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) and Department of Defense (DOD) and United States Army (Army) policy. In addition, the FOST includes the CERCLA Notice, Covenant, and Access Provisions and other Deed Provisions (Attachment 4) and the Environmental Protection Provisions (EPPs) (Attachment 5) necessary to protect human health or the environment after such transfer.

2.0 PROPERTY DESCRIPTION

The Property proposed for transfer consists of twenty-nine (29) parcels (approximately 1,894 acres) of developed and undeveloped land on the former Fort Ord (Plate 1 [Attachment 1]). The Property is intended to be transferred for a variety of uses, including state park facilities, roads and road improvements, education, habitat management, mixed use and development (Table 1 – Description of Property [Attachment 3]). This is consistent with the intended reuse of the Property as set forth in the Fort Ord Reuse Authority (FORA) Fort Ord Reuse Plan. A parcel location map is provided in Plate 2 (Attachment 1) and detailed site maps of the Property are provided in Plates 3 through 9 (Attachment 1).

Twenty-two (22) of the parcels are within Track 0¹ areas and are adjacent to or overlapped by Track 1² munitions response sites (MRS)³. The *Final Record of Decision, No Action Regarding*

¹ Track 0 areas at the former Fort Ord are those that contain no evidence of munitions and explosives of concern (MEC) and have never been suspected of having been used for military munitions-related activities of any kind. This definition has been clarified in the *Explanation of Significant Differences, Final Record of Decision, No Action Regarding Ordnance-Related Investigations (Track 0 ROD), Former Fort Ord, California (March 2005)* to include areas not suspected as having been used for military munitions-related activities of any kind, but where incidental military munitions have been discovered.

² Track 1 sites at the former Fort Ord are those sites where military munitions were suspected to have been used, but based on the RI/FS for each site, it falls into one of the following three categories: Category 1: There is no evidence to indicate military munitions were used at the site (i.e., suspected training did not occur); or Category 2: The site was used for training, but the military munitions items used do not pose an explosive hazard (i.e., training did not involve explosive items); or Category 3: The site was used for training with military munitions, but military munitions items that potentially remain as a result of that training do not pose an unacceptable risk based on site specific evaluations conducted in the Track 1 OE RI/FS. Field investigations identified evidence of past training involving military munitions, but training at these sites involved only the use of practice and/or pyrotechnic items that are not designed to cause injury. In the unlikely event that a live item of the type previously observed at the site is found, it is not expected that the item would function by casual contact (i.e., inadvertent and unintentional contact).

Ordnance-Related Investigation, Former Fort Ord, California (Track 0 ROD; June 19, 2002) addresses selected land parcels and provides a "Plug-In" process to address future land parcels that are considered eligible for inclusion into the Track 0 process. The Track 0 No Action ROD Plug-In process addresses areas of land at the former Fort Ord that have no history of military munitions use and for which No Action is necessary to protect human health and the environment. The portions of these 22 parcels within Track 0 areas have been addressed through the Plug-In process in the *Track 0 Plug-In Approval Memorandum, Selected Parcels – Group C Former Fort Ord, California* dated July 1, 2005. The portions of these 22 parcels within Track 1 sites are addressed by the *Record of Decision, No Further Action Related to Munitions and Explosives of Concern—Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22)* (Track 1 ROD; March 10, 2005). The Track 1 ROD also provides a Plug-In process to address future sites that are considered eligible for inclusion into the Track 1 process. No further action related to munitions and explosives of concern (MEC) (explosive munitions items) is required at Track 1 sites because MEC is not expected. Track 1 sites were evaluated through the remedial investigation/feasibility study (RI/FS) process and documented in the *Final Track 1 Ordnance and Explosives, Remedial Investigation/Feasibility Study, Former Fort Ord California* dated June 21, 2004 and the *Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area, Former Fort Ord, California* dated May 6, 2005 which provided the site-specific rationale for assigning Track 1 status. All 22 Track 0 Plug-In parcels and associated Track 1 sites are listed in Table 2 – Track 0 Plug-In Parcels Associated with Track 1 Sites (Group C) (Attachment 3). The remaining seven (7) parcels are entirely within Track 1 sites. The Track 1 ROD also addresses these parcels, which are listed with associated Track 1 sites in Table 3 – Track 1 Parcels and Associated Track 1 Sites (Attachment 3).

3.0 ENVIRONMENTAL DOCUMENTATION AND SITE INSPECTION

The Army made a determination of the Environmental Condition of the Property (ECP) by reviewing existing environmental and military munitions response-related documents and making an associated visual site inspection. A complete list of the documents reviewed is provided in Attachment 2 and the site inspection was conducted in January and February 2005. For each parcel in the FOST, the specific decision documents that support the determination that the Property is suitable for transfer are listed in Table 4 – Applicable Decision Documents by Parcel (Attachment 3).

4.0 ENVIRONMENTAL CONDITION OF PROPERTY

On the basis of environmental condition, parcels are placed in one of seven Community Environmental Response Facilitation Act (CERFA)/DOD Environmental Condition of Property (ECP) Categories⁴. Only parcels in ECP Categories 1 through 4 are suitable for transfer through

³ Terminology describing military munitions and related names, places, actions and conditions is presented in Attachment 6.

⁴ ECP Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent area).

ECP Category 2: Areas where only release or disposal of petroleum products has occurred.

ECP Category 3: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

a FOST. Table 5 – Environmental Condition of Property (Attachment 3) lists the parcels in this FOST, the corresponding ECP Category, and brief descriptions of necessary remedial actions that have been taken. The ECP Categories and the corresponding parcels in this FOST are as follows:

ECP Category 1 Parcels: E11a, E11b.6.2, E15.2, E20c.2.1, L20.13.5, L20.14.1.1, L20.14.2, L20.15, L20.6, L31, S3.1.3, and S3.1.4

ECP Category 2 Parcels: L23.5.1

ECP Category 3 Parcels: E2a, E4.1.2.1, E4.1.2.2, E4.1.2.3, L9.1.1.2, and L9.1.2.2

ECP Category 4 Parcels: E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1, L5.6.2, S3.1.1, S3.1.2, and S4.1.1

ECP Category 5 Parcels: No parcels in this FOST are in this category.

ECP Category 6 Parcels: No parcels in this FOST are in this category.

ECP Category 7 Parcels: No parcels in this FOST are in this category.

A summary of the ECP Categories for the Property is provided in Table 5 – Environmental Condition of Property (Attachment 3).

Community Environmental Response Facilitation Act (CERFA) Report

The Final CERFA Report, Fort Ord, Monterey, California (*April 1994*) summarized the CERFA investigation conducted at the former Fort Ord and classified Fort Ord property as “Uncontaminated,” “Qualified⁵,” or “Disqualified⁶.” Qualified areas were identified based on the potential presence of unexploded ordnance (UXO)⁷, radon, radionuclides (contained within products being used for their intended purposes), asbestos (contained within building materials), or lead-based paint (present on building material surfaces). Disqualified areas were identified based on evidence of release, disposal, or storage for more than one year of a CERCLA hazardous substance, petroleum, or petroleum derivative; or a portion of the installation

ECP Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

ECP Category 5: Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required actions have not yet been taken.

ECP Category 6: Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.

ECP Category 7: Areas that have not been evaluated or require additional evaluation.

⁵ CERFA parcel with qualifier - A portion of the installation real property for which investigation revealed no evidence of a release or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives and no evidence of the parcel being threatened by migration of such substances from outside the parcel. The parcel does however contain environmental, hazard, or safety issues, including asbestos contained in building materials or lead-based paint applied to building material surfaces.

⁶ CERFA disqualified parcel – A portion of the installation real property for which investigation revealed evidence of a release or disposal of CERCLA hazardous substances, petroleum, or petroleum derivatives or the parcel being threatened by migration of such substances from outside the parcel.

⁷ The term “munitions and explosives of concern (MEC)” is not used here because the CERFA Report is specific to UXO (see Attachment 6).

threatened by such release or disposal. The U.S. Environmental Protection Agency (US EPA) concurred with the Army's determination of "uncontaminated" for 60 CERFA parcels at the former Fort Ord in a letter dated April 19, 1994. In this letter, US EPA specifically concurred that parcels having buildings with probable lead-based paint (LBP) could be considered uncontaminated because the information in the CERFA Report did not indicate that there are residual levels of LBP on these parcels presenting a threat to human health or the environment. Under the DOD Authorization Act for 1997, the U.S. Congress expanded the definition of "Uncontaminated Property" to include the storage of hazardous substances, petroleum products and their derivatives provided there was no release or disposal of these materials. Table 5 – Environmental Condition of Property (Attachment 3) includes a list of the Track 1 and Track 0 Plug-in C Parcels, the CERFA classification assigned, and rationale.

Parcels located within areas originally identified as CERFA Qualified or Disqualified, but through additional site investigation were determined to be Uncontaminated (DOD Category 1), are described below.

Parcel E11a

This Track 0 plug-in parcel was categorized as CERFA Uncontaminated; however, portions of the parcel include Munitions Response Sites (MRS)-27Y and MRS-66, which were identified after the completion of the CERFA investigation (Plate 7 [Attachment 1]). MRS-27Y and MRS-66 were categorized as Track 1 sites, evaluated in the Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study (OE RI/FS) and, in accordance with the Track 1 ROD (*March 10, 2005*), require no further action related to MEC. MRS-27Y and MRS-66 were also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the Basewide Range Assessment (BRA), as described in the *Comprehensive Basewide Range Assessment Report, Former Fort Ord, California* (BRA Report; March 31, 2005). Under the BRA MRS-27Y was identified as historical area (HA)-157 and MRS-66 was identified as HA-196. In accordance with the findings of the BRA Report, no further action related to chemical contamination is required for HA-157 (MRS-27Y). In accordance with the findings of the BRA Report, no further investigation for chemical contamination is required for HA-196 (MRS-66).

Based on this information Parcel E11a meets the definition of CERFA Uncontaminated property.

Parcel E11b.6.2

This Track 1 parcel was categorized as CERFA Uncontaminated; however, the parcel includes a small portion of the area evaluated as part of the overall investigation of Site 39A, East Garrison Ranges, and a portion of MRS-59A, which was identified after the completion of the CERFA investigation (Plate 8 [Attachment 1]). A release at Site 39A (Interim Action Site 39A) occurred in the target areas of the former small arms ammunition firing ranges approximately 600 feet to the north and northeast and outside of the parcel boundary.

MRS-59A was categorized as a Track 1 site, evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-59A was also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the BRA. Under the BRA MRS-59A was included within HA-189. The

evaluation of HA-189 included a literature search, site reconnaissance, and mapping. In accordance with the findings of the BRA Report, no further investigation for chemical contamination is required for HA-189 (including MRS-59A).

Based on this information Parcel E11b.6.2 meets the definition of CERFA Uncontaminated property.

Parcel E15.2

A portion of this Track 0 plug-in parcel was categorized as CERFA Qualified because it includes MRS-20 (Plate 3 [Attachment 1]). MRS-20 (Recoilless Rifle Training Range) was categorized as a Track 1 site, evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. Historical research and military munitions sampling conducted at this site found no evidence of past training involving military munitions. As identified on the 1957 Training Facilities Map, some of the boundary of the "Recoilless Rifle Training Area" lies outside of the boundary of MRS-20 delineated in the ASR; however, because of its location, proximity to existing housing, Highway 1 and other developed areas, it is unlikely MRS-20 or additional areas identified on the 1957 Training Facilities Map would have been used for training with military munitions. As discussed in the Track 1 OE RI/FS, training at this site probably involved weapon familiarization, including the proper handling, deployment, and care of recoilless rifles. MRS-20 was also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the BRA. Under the BRA, MRS-20 was identified as HA-122. In accordance with the findings of the BRA Report, no further action related to chemical contamination is required for HA-122 (MRS-20). A portion of the parcel was categorized as CERFA Qualified because of the presence of asbestos containing material (ACM) and probable lead-based paint (LBP) in buildings that are adjacent to the parcel; however, no buildings are present on Parcel E15.2. The remainder of the parcel was categorized as CERFA Uncontaminated.

Based on this information Parcel E15.2 meets the definition of CERFA Uncontaminated property.

Parcel E20c.2.1 and L31

Track 0 Plug-in Parcel E20c.2.1 was categorized as CERFA Uncontaminated (Plate 3 [Attachment 1]). A portion of Track 0 Plug-in Parcel L31 was categorized as CERFA Uncontaminated and the remainder of the parcel was categorized as CERFA Qualified because of the presence of ACM and probable LBP in buildings that are adjacent to the parcel; however, no buildings are present on Parcel L31. Both parcels include a portion of MRS-49 identified after the completion of the CERFA investigation. MRS-49 was categorized as a Track 1 site, evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-49 was also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the BRA. Under the BRA, MRS-49 was identified as HA-179. In accordance with the findings of the BRA Report, no further investigation for chemical contamination is required for HA-179 (MRS-49).

Based on this information Parcels E20c.2.1 and L31 meet the definition of CERFA Uncontaminated property.

Parcels L20.15, S3.1.3, and S3.1.4

These Track 1 parcels were categorized as CERFA Disqualified because they were included within the area of Installation Restoration Program (IRP) Site 3 (MRS-22) (Plate 5 [Attachment 1]), where there was a release of lead related to range activities and because of the presence of construction debris and vehicle parts within Parcel S3.1.3. Remediation at IRP Site 3 included the excavation of approximately 162,800 cubic yards of impacted soil and spent ammunition; however, none of these three parcels lie within the areas historically used for small arms ranges in IRP Site 3 and did not require remediation.

These three parcels were also categorized as CERFA Qualified because of the presence of ACM, LBP and MRS-22. MRS-22 is categorized as a Track 1 site, evaluated in the Track 1 OE RI/FS and in accordance with the Track 1 ROD, requires no further action related to MEC.

MRS-22 was also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the BRA. Under the BRA, MRS-22 was identified as HA-124, which includes HA-1 through HA-17⁸. In accordance with the findings of the BRA Report, no further action related to chemical contamination is required for HA-124.

Based on this information Parcels L20.15, S3.1.3 and S3.1.4 meet the definition of CERFA Uncontaminated property.

Parcel L20.6

This Track 1 parcel was categorized as CERFA Uncontaminated; however, the parcel includes MRS-62, which was identified after the completion of the CERFA investigation (Plate 9 [Attachment 1]). MRS-62 was categorized as a Track 1 site, evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-62 was also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the BRA. Under the BRA MRS-62 was identified as HA-192. In accordance with the findings of the BRA Report, no further investigation for chemical contamination is required for HA-192 (MRS-62).

Based on this information Parcel L20.6 meets the definition of CERFA Uncontaminated property.

Parcel L20.13.5

This Track 0 plug-in parcel (Plate 10 [Attachment 1]) was categorized as CERFA Qualified because of its proximity to the former Impact Area; however, this parcel comprises a portion of South Boundary Road and is located outside of the fenced Impact Area. No evidence was observed during the CERFA assessment to indicate storage, release, or disposal of hazardous substances or petroleum products or their derivatives within this parcel; therefore, this parcel meets the definition of CERFA Uncontaminated property.

⁸ The designations of the individual ranges at the Beach Ranges complex under the BRA.

Parcels L20.14.1.1 and L20.14.2

These Track 0 plug-in parcels comprise portions of Intergarrison Road and associated right-of-ways. The parcels were categorized as CERFA Uncontaminated; however, the parcels include a portion of MRS-27Y identified after the completion of the CERFA investigation (Plate 7 [Attachment 1]). MRS-27Y was categorized as a Track 1 site, evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-27Y was also evaluated for the potential presence of chemical contamination related to the use of military munitions as part of the BRA. Under the BRA MRS-27Y was identified as HA-157. In accordance with the findings of the BRA Report, no further action related to chemical contamination is required for HA-157 (MRS-27Y).

Based on this information Parcels L20.14.1.1 and L20.14.2 meet the definition of CERFA Uncontaminated property.

4.1 Environmental Remediation Sites

There were nine remediation sites located on the Property. The environmental remediation sites on the Property are described below. All environmental soil and groundwater remediation activities on the Property have been completed or are in place and operating properly and successfully; however, portions of the Property have not remediated to levels suitable for unrestricted use. The deeds for these portions of the Property will include restrictions on the use of groundwater as described in the Covenant to Restrict Use of Property – Environmental Restrictions (Special Groundwater Protection Zone) (CRUP). A summary of the environmental remediation sites by parcel is provided in Table 5 – Environmental Condition of Property (Attachment 3).

This section provides a summary of Installation Restoration Program (IRP) activities conducted to date at operable units and CERCLA sites located on the Property. Seven IRP sites are located on the Property in whole or in part within Parcels S3.1.1, S3.1.2 and S3.1.4, (Site 1/FTO-059, Site 2/FTO-012, Site 3 and Outfall 15) (Plates 4 and 5 [Attachment 1]); Parcel E4.3.2.1 (Site 26) (Plate 6 [Attachment 1]); Parcel S4.1.1 (Site 28) (Plate 4 [Attachment 1]); and Parcel E11b.6.2 (Site 39A) (Plate 8 [Attachment 1]). The investigation of the IRP sites was conducted under the Fort Ord Basewide Remedial Investigation/Feasibility Study (RI/FS) program. One Operable Unit is also located on the Property.

4.1.1 No Action Sites

IRP Sites 26 and 28 were categorized as No Action Sites. The No Action Plug-In Record of Decision (ROD) (*February 16, 1995*) for all No Action Sites was signed by the regulatory agencies in the spring of 1995. Documentation that site-specific no action criteria were met is provided in the Approval Memoranda process. The overall process is referred to as the “plug-in” process because the Approval Memoranda plug-in to the No Action ROD. The US EPA and the DTSC concurred that Sites 26 and 28 met the criteria for No Action in letters dated September 25, 1995 and October 10, 1995, respectively.

4.1.2 Interim Action Sites

Three sites (Site 1, Site 39A, and Outfall 15) on the Property were categorized as Interim Action (IA) Sites based on the results of site characterization activities. By definition, IA sites have limited surficial soil contamination that can be addressed by excavation and follow-up confirmation sampling. The selected interim action completed at each site addressed immediate, imminent, and/or significant risks to human health and the environment posed by limited contaminated soil. The *Interim Action Record of Decision, Contaminated Surface Soil Remediation* (IA ROD; February 23, 1994) presented remedial alternatives to be implemented at IA sites. The IA ROD was signed by the DTSC and the US EPA in March 1994. A discussion of the interim actions conducted at these three sites follows.

Site 1. IRP Site 1 (SWMU FTO-059) was investigated during the Basewide RI/FS for hazardous and toxic waste (HTW). Mercury was detected in soil samples collected near a former trickling filter at concentrations exceeding the Preliminary Remediation Goal (PRG). Low concentrations of fecal coliform were also detected. An additional investigation was conducted to address agency concerns about elevated mercury levels within soil at the former trickling facility and to evaluate the suitability of disposing treated sewage residue from the sludge-drying beds at the OU2 Landfills. Soil samples were collected from the sludge drying beds, the holding ponds and from the former trickling filter area. Based on the data from the additional investigation, the soil at the former trickling filter was recommended for removal under the IA ROD (*February 23, 1994*). Approximately 740 cubic yards of soil were removed as part of the IA activities. The cleanup of SWMU FTO-059 is described in Section 4.2.1. The Site 1 IA Confirmation Report was submitted to the regulatory agencies in December 1997. The US EPA and the DTSC concurred that contamination was adequately remediated and no further action was necessary at Site 1 in letters dated April 6, 1998 and April 11, 2005, respectively.

Site 39A. The initial IA at Site 39A (East Garrison Ranges) was completed in 1998 and included the removal of soils in four study areas, which contained lead, arsenic, and polynuclear aromatic hydrocarbons (PAHs) exceeding PRGs. These exceedences resulted from accumulation of expended small arms ammunition, lead shot, and clay target fragments. None of the study areas are located on the Property. The Site 39A IA Confirmation Report for the four study areas was submitted to the regulatory agencies in October 1998. The US EPA concurred that no further action is necessary at Site 39A in a letter dated February 2, 2002. The DTSC withheld concurrence and requested that additional evaluation of accumulations of clay target fragments and lead shot be conducted within a former trap and skeet range, which is not located on the Property. In the summer of 2004, the Army excavated the clay target fragments and lead shot in question and conducted confirmation sampling within this area. The *Final Report, Clay Target Debris and Lead Shot Management, East Garrison Trap and Skeet Range* was submitted to the DTSC in March 2005. The DTSC concurred that no further action is necessary in a letter dated April 11, 2005.

A follow-up IA is proposed at two former small arms ammunition firing ranges located within Site 39A, but also not on the Property. These ranges (historical areas [HA]-80 and HA-85) were identified during the historical literature search performed during the Comprehensive Basewide Range Assessment (BRA). The proposed IA will include the removal of shallow soil containing lead at IA Areas 39A HA-80 and 39A HA-85 (*Approval Memorandum, Proposed Interim Action*

Excavation, IA Areas 39A HA-80 and 39A HA-85, Site 39A, East Garrison Ranges, Former Fort Ord, California, April 2005). The estimated volume of soil to be removed is 900 cubic yards.

Outfall 15 (OF-15). Surface water outfall OF-15 was identified for characterization under the Basewide RI/FS. OF-15 discharges to Parcel S3.1.1. Soil samples were collected at the discharge point and downgradient of OF-15. Based on the results of the characterization sampling removal of soil impacted with total petroleum hydrocarbons, arsenic, lead and dieldrin was recommended for removal under the IA ROD (*February 23, 1994*). Approximately 430 cubic yards of soil were removed as part of the IA activities. The Outfall 15 Confirmation Report was submitted to the regulatory agencies in September 1998. The US EPA and the DTSC concurred that contamination was adequately remediated and no further action was necessary at Outfall 15 in letters dated March 16, 2005 and April 11, 2005, respectively.

4.1.3 Remedial Investigation Sites

Site 2. IRP Site 2 (SWMU FTO-012) was investigated during the Basewide RI/FS for HTW. The primary chemicals of concern detected in soil were low concentrations of metals. A baseline human health risk assessment that included exposure of an onsite worker to soil (ingestion and dermal contact) and dust (inhalation) at the site was performed and risks were below the US EPA's threshold values. Based on the risk assessment no remedial action was proposed for soil at IRP Site 2 in the *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California* (Basewide RI Sites ROD; January 13, 1997); however, as described in Section 4.2.1, all sludge remaining in the STP sludge drying beds and evaporation ponds was removed as part of the maintenance and cleanup activities at the STP (SWMU FTO-012). The Basewide RI Sites ROD was signed by the DTSC on January 16, 1997, by the US EPA on January 17, 1997, and by the Regional Water Quality Control Board (RWQCB) on January 22, 1997.

Sites 2 and 12. The Sites 2 and 12 groundwater plume is being remediated by extraction and treatment in accordance with the Basewide RI Sites ROD (*January 13, 1997*). Since installation and start-up of the Sites 2 and 12 groundwater treatment system (*April 1999*), the extent of the plume has been significantly reduced. The Sites 2 and 12 Groundwater Remedy Operating Properly and Successfully Evaluation Report was submitted to the regulatory agencies in November 2001. On July 3, 2002, the Army received concurrence from the US EPA that the pump-and-treat system for remediation of the Site 2 and 12 groundwater plume is in place and operating "properly and successfully."

Site 3. Site 3 (Beach Trainfire Ranges) was investigated during the Basewide RI/FS for HTW. The site was used for small arms training beginning in the 1940s. Spent bullets accumulated on the east-facing (leeward) sides of the sand dunes that formed the "backstops" for the targets and in areas prone to erosion between sand dunes. The Basewide HTW RI/FS evaluated cleanup alternatives for soil containing lead and other metals to protect human health.

The *Interim Record of Decision, Site 3, Beach Trainfire Ranges, Fort Ord, California* (Site 3 Interim ROD; January 13, 1997) described the selected cleanup remedy for Site 3 to address potential risks to human health due to the presence of lead and other metals in soil at the site. The Site 3 Interim ROD was signed by the DTSC on January 16, 1997, by the US EPA on January 17, 1997 and by the RWQCB on January 22, 1997. The selected remedy consisted of the excavation of contaminated soil and spent ammunition. After the cleanup was completed,

post-remediation sampling determined that the remaining site-wide average lead concentration in soil was 161 milligrams per kilogram (mg/kg). The results of the post-remediation human health risk assessment confirmed that the cleanup of the heavy bullet distribution areas was protective of humans assuming future development of Site 3 as a State Park. The DTSC and the US EPA concurred with these findings in letter dated July 21, 2000 and September 20, 2000, respectively.

Following cleanup of the heavy bullet density areas, a Post-Remediation Ecological Risk Assessment was conducted to confirm that the cleanup was protective of plants and animals at the site. Based on the data collected at the site following cleanup, it was concluded that significant risks to populations of plants and animals from exposure to the lead and other metals remaining in soil at the site are not expected.

In accordance with the Track 1 ROD, no further remedial action with monitoring at Site 3 (MRS-22) is required for the following reasons: (1) a substantial portion of bullets and contaminated soil have been removed from the site; (2) data collected before and after cleanup show that the remaining average site-wide concentrations of lead in soil is 161 mg/kg; and (3) the ecological sampling to date has shown that the cleanup appears to be protective of populations of plants and animals at the site and residual contamination in place is not likely to adversely affect the following federally listed species: Western snowy plover, Smith's blue butterfly, sand gilia, Monterey spineflower, Contra Costa goldfields, or Yadon's piperia. The Track 1 ROD was signed by the DTSC on March 30, 2005, by the RWQCB on April 4, 2005 and by the US EPA on April 7, 2005.

Ecological monitoring will be conducted at Site 3 (MRS-22) to confirm the results of the ecological risk assessments and evaluations conducted to date. Monitoring will be conducted pursuant to an approved work plan developed pursuant to Section 8.3 of the Fort Ord FFA (*November 19, 1990*). This data will be evaluated in conjunction with previous ecological risk assessment and evaluation data during the five-year reviews to assess the need for continued ecological monitoring and make sure the decision remains protective of the environment. The next five-year review will occur in 2007.

The DTSC has elected to undertake the following additional precautions at Site 3 (MRS-22): the DTSC will enter into Memorandum of Understanding (MOU) for further surveillance with the California Department of Parks and Recreation, which will be acquiring Site 3 (MRS-22); the DTSC also intends to enter into a Land Use Covenant (LUC) with the California Department of Parks and Recreation to enhance protection of human health. The MOU and LUC will address further monitoring and use of the land at Site 3 (MRS-22).

4.1.4 Operable Units (OUs)

OU2 Landfills. The Fort Ord Landfills (SWMU FTO-002) were used for approximately 30 years for residential and commercial waste disposal. The landfills cover approximately 150 acres and include the inactive main landfill (Areas B through F, south of Imjin Road) and north landfill (Area A, north of Imjin Road). Portions of Parcels E4.6.1, L5.6.1, and L5.6.2 are included within Area A (Plate 6 [Attachment 1]). All of Area A and some perimeter areas of the main landfill were removed and consolidated into the main landfill south of Imjin Road. The selected remedial action included excavation of the Area A landfill refuse and impacted soil, disposal of the material in the main OU2 Landfills, backfilling the Area A excavation, and

installation of an engineered cover system over the main landfill. This soil consolidation action allowed for clean closure of Area A as described in the Remedial Action Confirmation Report and Post-Remediation Risk Evaluation for Area A and the Remedial Action Construction Completion Report for Areas A through F. The RWQCB provided comments on and approval of the reports in a letter dated April 25, 2003. The letter also stated the RWQCB would be changing the OU2 Landfills permitting to reflect its closed status. The draft final document, dated January 31, 2005, was issued on February 2, 2005. The regulatory agencies had no additional comments and the document became final in March 2005 in accordance with the provisions of the Fort Ord FFA (November 19, 1990). Additional information regarding the OU2 Landfills is provided in Sections 4.2.1, 4.2.2 and 5.1.

4.2 Storage, Release, or Disposal of Hazardous Substances

There is no evidence that hazardous substances were stored, released, or disposed of on parcels E11a, E11b.6.2, E15.2, E20c.2.1, L20.13.5, L20.14.1.1, L20.14.2, L20.6 and L31 in excess of the 40 Code of Federal Regulations (CFR) Part 373 reportable quantities. The CERCLA 120(h)(4) Notice and Covenant at Attachment 4 will be included in the Deed for these parcels.

Hazardous substances were released on portions of the Property in excess of reportable quantities specified in 40 CFR Part 373. The release of these hazardous substances affects parcels E2a, E4.1.2.1, E4.1.2.2, E4.1.2.3, E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L20.15, L5.6.1, L5.6.2, L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.2, S3.1.3, S3.1.4, and S4.1.1. All hazardous substance storage operations have been terminated on the Property. Hazardous substances were released in excess of the 40 CFR Part 373 reportable quantities at sites described in Sections 4.2.1, 4.2.2, and 4.2.3 of this FOST. The release of hazardous substances at these sites was remediated as part of the Installation Restoration Program (IRP) in compliance with CERCLA. All necessary response actions have been taken and are described in this section and Section 4.1. A summary of the areas in which hazardous substance releases occurred is provided in Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal (Attachment 3). The CERCLA 120(h)(3) Notice and Covenant at Attachment 4 will be included in the Deed for these parcels.

4.2.1 Solid Waste Management Units (SWMUs)

Three former SWMUs (FTO-002, FTO-012 and FTO-059) are located on the Property. SWMU FTO-002 was identified as a former disposal area and includes portions of Parcels E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1, and L5.6.2; however, a buffer zone with a minimum width of 100 feet has been established around the actual former disposal area (Operable Unit 2 [OU2] Landfills) and no part of the OU2 Landfills is within any of these parcels (Plate 6 [Attachment 1]). FTO-012 and FTO-059 include portions of Parcel S3.1.1. SWMUs FTO-012 and FTO-059 are former sewage treatment plants.

SWMUs FTO-002 and FTO-012 were identified during a 1988 Army Environmental Hygiene Agency (AEHA; reorganized in 1994 as the U.S. Army Center for Health Promotion and Preventive Medicine [USACHPPM]) investigation. In 1996, under the Resource Conservation and Recovery Act (RCRA) and CERCLA integration that occurred as part of base closure, an inspection was completed for all SWMUs identified in 1988. During this inspection, several new SWMUs were identified, including SWMU FTO-059. The following summarizes the investigation activities conducted at the three former SWMUs on the Property.

SWMU FTO-002 (Abandoned Landfill) was identified during the 1988 AEHA investigation. The 1988 AEHA Interim Final Report on SWMUs noted that SWMU FTO-002 was a source of groundwater contamination. Remedial action construction at SWMU FTO-002 has been completed in accordance with the Operable Unit 2 (OU2) Landfills Record of Decision (ROD) (*July 15, 1994*) and as described in the Remedial Action Construction Completion Report. As part of that remedial action landfill material (refuse) buried within Parcels E4.6.1, L5.6.1, and L5.6.2 (Area A), including a portion of MRS-13A, was completely excavated and consolidated in areas of the OU2 Landfills to the south of the parcels. Area A has been identified as a "Special Case" Track 0 Area as described in Section 4.9. This work is summarized in the *Draft Final Remedial Action Confirmation Report and Post-Remediation Screening Risk Evaluation, Area A Operable Unit 2 Landfills, Former Fort Ord, California, April 2001, Revision 0*. The report and screening risk evaluation concluded adverse health effects are unlikely to occur and no further action at Area A is necessary. This document is appended to the Remedial Action Construction Completion Report for the OU2 Landfills. The draft final of this document, dated January 31, 2005, was issued on February 2, 2005. The regulatory agencies had no additional comments and the document became final in March 2005 in accordance with the provisions of the Fort Ord Federal Facility Agreement (FFA; *November 19, 1990*). Additional information regarding the OU2 Landfills is provided in Sections 4.1.4, 4.2.2 and 5.1.

SWMU FTO-012 was the Main Garrison Sewage Treatment Plant (IRP Site 2). The sewage treatment plant (STP) occupies an unpaved area of approximately 28 acres within Parcel S3.1.1 (Plate 4 [Attachment 1]). IRP Site 2 (SWMU FTO-012) was investigated during the basewide RI/FS for hazardous and toxic waste (HTW). A baseline human health risk assessment that included exposure of an onsite worker to soil and dust at the site was performed and risks were below the US EPA's threshold values. Based on the risk assessment no remedial action was proposed for soil at IRP Site 2 in the *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California* (Basewide RI Sites ROD; January 13, 1997); however, as part of the maintenance and cleanup activities associated with the closure of SWMU FTO-012, all sludge remaining in the STP sludge drying beds and evaporation ponds was removed. Additional SWMU cleanup activities included the demolition of the asphalt lined drying beds, removal of drying bed conveyance piping and excavation of soils below the drying beds and ponds. Additional discussion of the cleanup of FTO-012 (IRP Site 2) is provided in Section 4.2.2.

SWMU FTO-059 was the Ord Village Sewage Treatment Plant (IRP Site 1). This STP is located within Parcel S3.1.1 in the southwestern portion of the former Fort Ord (Plate 5 [Attachment 1]). IRP Site 1 (SWMU FTO-059) was investigated during the Basewide RI/FS for HTW. The cleanup of SWMU FTO-059 was conducted concurrently with Interim Action (IA) activities at Site 1. As part of the cleanup of SWMU FTO-059 all waste sludge associated with the operation of the STP was removed (approximately 870 cubic yards). Additional SWMU cleanup activities included the removal of an overflow bypass clay pipe; demolition and removal of the concrete footwall associated with a surge reservoir, chlorine building, chlorine contact chamber, and all associated valve pits. Additional discussion of the cleanup of FTO-059 (IRP Site 1) is provided in Section 4.1.2.

4.2.2 Groundwater Contamination

Two groundwater contamination plumes, OU2 Landfills (SWMU FTO-002) and Sites 2 and 12, underlie portions of the Property. The OU2 groundwater plume is the result of a release of hazardous substances from the OU2 Landfills and is being remediated in accordance with the OU2 ROD (*July 15, 1994*). The OU2 ROD was signed by the RWQCB on August 9, 1994, by the DTSC on August 18, 1994, and by the US EPA on August 23, 1994. On January 4, 1996, the Army received concurrence from the US EPA that the pump-and-treat system for remediation of the OU2 groundwater plume is in place and operating "properly and successfully." Additional information regarding the OU2 Landfills is provided in Sections 4.1.4, 4.2.1 and 5.1.

The Sites 2 and 12 groundwater plume is presumed to be the result of releases of hazardous substances associated with activities in the light industrial area of the former Fort Ord (RI Site 12) and is being remediated by extraction and treatment in accordance with the Basewide RI Sites ROD (*January 13, 1997*). The Basewide RI Sites ROD was signed by the DTSC on January 16, 1997, by the US EPA on January 17, 1997, and by the RWQCB on January 22, 1997. Since installation and start-up of the Sites 2 and 12 groundwater treatment system (April 1999), the extent of the plume has been significantly reduced. The Sites 2 and 12 Groundwater Remedy Operating Properly and Successfully Evaluation Report was submitted to the regulatory agencies in November 2001. On July 3, 2002, the Army received concurrence from the US EPA that the pump-and-treat system for remediation of the Site 2 and 12 groundwater plume is in place and operating "properly and successfully."

The Baseline Risk Assessments for the Sites 2 and 12 and OU2 groundwater plumes indicates that the groundwater does not pose a threat to occupants of the buildings on the Property, provided that groundwater from the contaminated aquifers is not used as a drinking water source. Well drilling and use of groundwater will be prohibited. Restriction and notification for groundwater contamination are detailed in the Environmental Protection Provisions (Attachment 5).

4.2.3 Basewide Range Assessment (BRA)

Each of the munitions response sites that lie within the Property were investigated as part of the BRA for small arms and multi-use ranges. For the BRA, the areas of investigation were identified as Historical Areas (HA). The assessment of each HA for potential hazardous and toxic waste-related contamination included a literature search and data review (i.e., review of historical maps, aerial photographs and data generated during sampling investigations, where conducted). Based on this research a determination was made whether site reconnaissance and mapping was warranted. Areas of interest (e.g., training area boundaries, disturbed vegetation areas, and roads) were identified from maps and photographs and their locations (waypoints) uploaded into a Global Positioning System (GPS) unit. The site reconnaissance was conducted by a two-person team that included a military munitions specialist and a second team member trained in munitions recognition. The site reconnaissance included walking portions of the site and navigating to the waypoints using the GPS unit. If evidence of a release was observed sampling for chemical contamination was performed. The US EPA and the DTSC provided comments on the *Draft Comprehensive Basewide Range Assessment Report, Former Fort Ord, California* (BRA Report) and the draft final BRA Report (*March 31, 2005*) was issued in March

2005. The US EPA and the DTSC provided no additional comments and, in accordance with the provisions of the Fort Ord FFA (*November 19, 1990*), the BRA Report became final in April 2005. The following discusses the results of the BRA conducted on the Property.

HA-90 (MRS-1) is included within Parcels E2a, E4.1.2.1, E4.1.2.2, L9.1.1.2, and L9.1.2.2 (Plate 4 [Attachment 1]). The assessment of HA-90 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-1. Based on the results of the literature search, site history (the area was used for a limited time in the 1950s, and then later graded for housing), and no stained soil was identified, no further action related to chemical contamination is required for HA-90.

HA-96 (MRS-6) is included within Parcels E2a and S4.1.1 (Plate 4 [Attachment 1]). The assessment of HA-96 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-6. Based on the results of the literature search, and because only one small arms round and one practice mine were found during sampling, no further action related to chemical contamination is required for HA-96.

HA-102 (MRS-13A) is included within Parcels E4.3.2.1, E4.6.1, E4.6.2, L5.6.1, and L5.6.2 (Plate 6 [Attachment 1]). The assessment of HA-102 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-13A. Based on the results of the literature search and absence of munitions debris observed during military munitions sampling, no further action related to chemical contamination is required for HA-102.

HA-122 (MRS-20) is included within Parcel E15.2 (Plate 3 [Attachment 1]). The assessment of HA-122 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-20. Based on the results of the literature search and absence of munitions debris observed during military munitions sampling, no further action related to chemical contamination is required for HA-122.

HA-124 (MRS-22) is included within Parcels S3.1.1, S3.1.2, S3.1.3, S3.1.4, and L20.15 (Plates 4 and 5 [Attachment 1]). The assessment of HA-124 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-22. HA-124 encompasses all of the small arms ammunition firing ranges that were located within MRS-22 (HA-1 through HA-17). Remediation of each of the beach ranges has been completed, and no further action related to chemical contamination is required for HA-124, which includes HA-1 through HA-17.

HA-157 (MRS-27Y) is included within Parcels E11a and L20.14.1.1 (Plate 7 [Attachment 1]). The assessment of HA-157 for potential hazardous and toxic waste related to military munitions included a literature search and a review of the information gathered during the assessment and military munitions sampling conducted at MRS-27Y and adjacent MRS-66. Based on the results of the literature search and absence of munitions debris observed during military munitions sampling, no further action related to chemical contamination is required for HA-157.

HA-179 (MRS-49) is included within Parcels E20c.2.1, L23.5.1, and L31 (Plate 3 [Attachment 1]). The assessment of HA-179 for potential hazardous and toxic waste-related contamination included a data review, site reconnaissance, and mapping of the site. No evidence of military munitions was observed during the site reconnaissance conducted at the HA-179. Three fighting positions were found along a path that runs between Parcel L23.5.1 and HA-179; however, no targets or range features were identified and no further investigation for chemical contamination action is required for HA-179.

HA-189 (MRS-59) is included within Parcel E11b.6.2 (Plate 8 [Attachment 1]). The assessment of HA-189 for potential hazardous and toxic waste related to military munitions included a literature search, site reconnaissance, and mapping of the site. The site reconnaissance of HA-189 was performed in December 2001. Only expended blank small arms ammunition casings were found. No military munitions or evidence of military training were identified during the site walk and no further action related to chemical contamination is required for HA-192.

HA-192 (MRS-62) is included within Parcel L20.6 (Plate 9 [Attachment 1]). The assessment of HA-192 for potential hazardous and toxic waste related to military munitions included a literature search, site reconnaissance, and mapping of the site. The site reconnaissance of HA-192 was performed in November 2001. Only expended blank small arms ammunition casings were found. No military munitions or evidence of military training were identified during the site walk and no further action related to chemical contamination is required for HA-192.

HA-196 (MRS-66) is included within Parcel E11a (Plate 7 [Attachment 1]). The assessment of HA-196 for potential hazardous and toxic waste related to military munitions included a literature search, site reconnaissance, and mapping of the site. The site reconnaissance of HA-196 was performed in December 2001. No military munitions or evidence of military training were identified during the site walk and no further action related to chemical contamination is required for HA-196.

4.3 Petroleum and Petroleum Products

4.3.1 Underground and Aboveground Storage Tanks (UST/AST)

Current UST/AST Sites

There are four aboveground storage tanks (ASTs) on the Property. Two ASTs on the Property (6143 and 8775) are currently used for storage of petroleum products (Table 7 – Notification of Petroleum Product Storage, Release, or Disposal [Attachment 3]) and two ASTs on the Property that were formerly used to store propane that are no longer in use (4367.1 and 4367.2). ASTs 6143 and 8775 are located in Buildings 6143 and 8775, respectively, and are associated with sewage lift station pumps. ASTs 6143 and 8775 and the associated real property were transferred to FORA by deed on October 17, 2002. There is no evidence of petroleum releases from the four tanks.

Former UST/AST Sites

There were eight underground storage tanks (USTs) on the Property used for storage of petroleum products. All eight of the USTs have been removed. Releases of petroleum products occurred at the following USTs: 4362.1, 4362.2, and 2070.1. The release of petroleum products

from these USTs was remediated and closure granted by the Monterey County Department of Health (MCDOH) for all eight of the USTs. A summary of petroleum product storage, including remedial actions and dates of closure, is provided in Table 7 – Notification of Petroleum Product Storage, Release, or Disposal (Attachment 3).

4.3.2 Non-UST/AST Storage, Release, or Disposal of Petroleum Products

Based on a review of existing records and available information, there is no evidence that petroleum products in excess of 55 gallons at one time were stored, released, or disposed of on the Property as the result of non-UST/AST petroleum activities. Accordingly, there is no need for notification regarding non-UST/AST petroleum product storage, release, or disposal.

4.4 Polychlorinated Biphenyls (PCB)

There are no PCB-containing transformers or other PCB-containing equipment, with the exception of possible PCB-containing light ballasts, located on the Property. Based on a review of existing records and available information, PCB-containing light ballasts may be located on the Property. Fluorescent light ballasts manufactured or installed prior to 1978 may contain PCBs in the potting material. PCB-containing light ballasts do not pose a threat to human health and the environment when managed properly.

4.5 Asbestos

Based on the *Asbestos Survey Report, For U.S. Army Corps of Engineers, Fort Ord Installation (April 26, 1993)*, asbestos containing materials (ACM) were identified within buildings or structures on the Property. Detailed descriptions of the asbestos type, location, and condition rating (at the time of survey) are provided in the Asbestos Survey Report. A list of the buildings and whether asbestos was identified is provided in Table 1 – Description of Property (Attachment 3).

As noted in the *Asbestos Survey Report*, some of the buildings contain friable ACM in good to poor condition. Friable ACM may pose a health risk if not managed properly. Friable ACM can be effectively managed in place, provided the proper precautions are taken to minimize or eliminate exposure of personnel to airborne asbestos. The Army does not intend to remove or repair the ACM present in the buildings, but discloses its existence and condition. The friable asbestos that has not been removed or encapsulated will not present an unacceptable risk to human health because it will be managed by the Grantee as described in Section 5 of the Environmental Protection Provisions. Any recommended inspection of ACM present in these buildings will be the responsibility of the recipient. Appropriate asbestos notice is given herein and will be included in the deed. The deed will include the asbestos warning and covenant included in the Environmental Protection Provisions (Attachment 5).

4.6 Lead-Based Paint (LBP)

Buildings on the Property known or presumed to contain lead-based paint (LBP) are listed by parcel number in Table 1 – Description of Property (Attachment 3). Parcels E11a, E15.2, E4.1.2.3, E4.6.1, E4.6.2, E8a.1.1.2, L20.13.5, L20.14.1.1, L20.14.2, L20.6, S3.1.1, S3.1.2, S3.1.3, S3.1.4 and S4.1.1 were not used for residential purposes and the transferee does not intend to use these parcels for residential purposes in the future. Parcels E11b.6.2, E2a, L20.15,

and L5.6.1 do not contain any buildings or structures and were not used for residential purposes; however, the transferee intends to use these parcels for development, which may include residential purposes in the future. Parcel E20c.2.1 does not contain any buildings or structures and was not used for residential purposes; however, the transferee intends to use the parcel for residential purposes in the future. Parcel L5.6.2 was used for residential purposes and the transferee does not intend to use this parcel for residential purposes in the future. Parcel L23.5.1 was used for residential purposes and the transferee intends to use this parcel for development, which may include residential purposes in the future. Parcels E4.1.2.1, E4.1.2.2, E4.3.1.2, E4.3.2.1, L31, L9.1.1.2, and L9.1.2.2 were used for residential purposes and the transferee intends to use these parcels for residential purposes in the future. The deed will include the lead-based paint warning and covenant provided in the Environmental Protection Provisions (Attachment 5).

Lead-based paint surveys have been completed within the Patton Park housing areas, which includes Parcels E4.1.2.1, E4.1.2.2, L9.1.1.2, and L9.1.2.2. The first survey, conducted in November 1993 through March 1994, included the sampling of the interior and exterior components (e.g., walls, doorframes, baseboards, windowsills, downsills, downspouts, etc.) of 150 randomly selected housing units in Patton Park. Out of 150 units sampled, at least one component tested positive for lead in 125 of the 150 units.

Additional lead sampling (wipe, paint chip, and soil) was completed in Patton Park in December 2000 as part of a LBP risk assessment. Wipe and paint chip samples were collected from the interior of 148 randomly selected Patton Park housing units. A limited number of windowsill and floor wipe samples had lead dust results exceeding allowable levels for those surfaces. Paint chip samples (466) were collected from locations of paint deterioration. Results of the paint chip sampling confirmed and assessed the LBP associated with the Patton housing units. Four hundred and seventy-nine composite soil samples were collected using random sampling protocol and analyzed for lead. The samples were collected from the housing unit drip lines and mid-yard locations, and from playgrounds associated with the housing areas. With the exception of two mid-yard samples, none of the lead levels in the soil samples exceeded the US EPA, Department of Housing and Urban Development (HUD), or State of California lead criteria. Two of the mid-yard sample results exceeded the State of California allowable lead limits (1,000 mg/kg) for lead in non-play areas.

Due to the previous elevated lead concentrations in two of the soil samples collected as part of a LBP risk assessment conducted at Patton Park housing, seven additional composite soil samples were collected by the Army and seven composite soil samples were collected by the DTSC. The soil samples were collected in March 2002 from drip lines and parallel mid-yard areas where previous soil samples collected in October and November 2000 resulted in high total lead concentrations. The concentration of total lead in the seven composite soil samples collected by the Army from the re-sampled areas ranged from non detect, which is at or below the laboratory reporting limit of 10 parts per million (ppm), to 60 ppm. None of the soil samples exceeded the US EPA, HUD, or State of California lead criteria. The results of the DTSC sampling were similar to those found by the Army. In a letter to the Mayor of the City of Marina dated June 5, 2003, the DTSC stated that, based on the results of the re-sampling of soil by the Army and the DTSC in Patton Park, the housing area was suitable for unrestricted use.

4.7 Radiological Materials

One building on the Property (Building 916, Parcel S3.1.1) was among 230 former Fort Ord buildings that were suspected to have contained/stored radioactive commodities at some point in the past, but for which no documented evidence was found. The use of radioactive commodities at former Fort Ord was limited to those under the control of a specific Nuclear Regulatory Commission (NRC) license, or those managed under Department of the Army authorization. Twenty percent of the 230 buildings were randomly sampled by the U.S. Army Environmental Hygiene Agency (AEHA; reorganized in 1994 as the U.S. Army Center for Health Promotion and Preventive Medicine [USACHPPM]). No radiological health hazards were identified for the twenty percent sampled, and USACHPPM recommended that all 230 buildings be released for unrestricted use (memorandum dated May 2, 1997). In a memorandum dated October 1, 1997, the California Department of Health Services (DHS) released all buildings with documented or suspected use or storage of radioactive commodities (including Building 916) for unrestricted use.

4.8 Radon

Radon surveys were conducted in approximately 2,900 buildings at the former Fort Ord in 1989 and 1990. Radon was not detected at or above the US EPA residential action level of 4 picocuries per liter (pCi/L) in buildings on the Property.

4.9 Munitions and Explosives of Concern (MEC)

A review of existing records and available information, including the Archive Search Report (ASR), ASR Supplement No. 1 and the draft Revised ASR (*December 1993, November 1994 and December 1997*, respectively), the Site 39 Data Summary (*February 1994*), the Literature Review Report (*January 2000*), the Track 0 ROD (*June 2002*), the Final Track 1 OE RI/FS (*June 2004*), the Track 1 ROD (*March 2005*), the Track 0 Plug-In Approval Memorandum Selected Parcels – Group B (*March 2005*), the Track 0 Plug-In Approval Memorandum Selected Parcels – Group C (*July 2005*), military munitions contractor after-action reports, working maps, Fort Ord Training Facilities Maps, and associated interviews from various ordnance-related community relations activities, indicates that ten former munitions response sites (MRSs) are present on the Property as described below. The ten MRSs (MRS-1, MRS-6, MRS-13A, MRS-20, MRS-22, MRS-27Y, MRS-49, MRS-59A, MRS-62, and MRS-66) were determined to be Track 1 munitions response sites. In addition, the area between MRS-1 and MRS-6, the MRS-6 Expansion Area, was evaluated and determined to meet the Track 1 Plug-In criteria (*Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area*, dated May 6, 2005). No further action related to munitions and explosives of concern (MEC) is required at Track 1 sites because MEC is not expected. The term “MEC” means military munitions that may pose unique explosives safety risks, including: (A) unexploded ordnance (UXO), as defined in 10 U.S.C. §101(e)(5); (B) discarded military munitions (DMM), as defined in 10 U.S.C. §2710(e)(2); or (C) munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. §2710(e)(3), present in high enough concentrations to pose an explosive hazard. The Track 1 ROD was signed by the DTSC on March 30, 2005 and the US EPA on April 6, 2005. Track 1 sites were evaluated through the RI/FS process and documented in the Track 1 OE RI/FS. The Track 1 OE RI/FS provided the site-specific rationale for assigning Track 1 status. The remainders of the parcels that lie outside of the Track 1 site(s) are considered Track 0 areas. The Track 0 No Action ROD Plug-in process

addresses single or grouped areas of land at the former Fort Ord that have no history of military munitions use and for which No Action is necessary to protect human health and the environment. The Track 0 ROD (*June 19, 2002*) was signed by the DTSC on June 25, 2002, and the US EPA on July 2, 2002. The evaluation of the portions of the parcels included in this FOST that lie outside of the Track 1 sites is presented in the *Track 0 Plug-In Approval Memorandum Selected Parcels – Group C, Former Fort Ord California* (Track 0 Approval Memo – Group C), dated July 1, 2005. The US EPA and the DTSC concurred with the determinations of the Track 0 Approval Memo – Group C in letters dated July 19, 2005 and July 22, 2005, respectively.

The following summarizes the results of the Military Munitions Response Program (MMRP) investigations that have been conducted on the Property.

MRS-1. MRS-1 lies within portions of Parcels E2a, E4.1.2.2, L9.1.1.2, and L9.1.2.2 (Plate 4 [Attachment 1]). MRS-1 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-1. MRS-1 meets the Track 1, Category 3⁹ criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-1.

MRS-6. MRS-6 lies within portions of Parcels E2a and S4.1.1 (Plate 4 [Attachment 1]). MRS-6 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-6. MRS-6 meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-6.

MRS-6 Expansion Area. The MRS-6 Expansion Area lies within Parcel E2a, between MRS-6 and MRS-1 and overlaps small portions of Parcels E4.1.2.1, E4.1.2.2 and S4.1.1 (Plate 4). The Track 1 OE RI/FS recommended that the boundary of MRS-6 be expanded to the south to include an area identified as a “Mine and Booby Trap Area” on a 1950s era training map. A site walk was conducted in 2004 to evaluate this area. The area walked included MRS-6, a portion of Parcel E2a between MRS-6 and MRS-1 (MRS-6 Expansion Area), and the very northern portion of MRS-1. Munitions debris items found during the site walk included expended practice mine fuzes within MRS-6 and an expended firing device within the portion of Parcel E2a between MRS-6 and MRS-1, which are consistent with both the type of munitions debris items found during previous sampling events and those expected in a practice mine and booby trap training area. The MRS-6 Expansion Area meets the Track 1, Category 3 criteria because historical research and field investigations identified evidence of past training involving military munitions, and training at this site involved only the use of practice and pyrotechnic items that are not designed to cause injury. The MRS-6 Expansion Area was evaluated in the *Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area*, dated May 6, 2005. Approval of the “Plug-In” of the MRS-6 Expansion Area into the Track 1 ROD was granted by the US EPA on

⁹ Category 3: The site was used for training with military munitions, but military munitions items that potentially remain as a result of that training do not pose an unacceptable risk based on site-specific evaluations conducted in the Track 1 OE RI/FS.

June 20, 2005 and by the DTSC on July 29, 2005. In accordance with eligibility criteria for Plug-In sites identified in the Track 1 ROD, no further action related to MEC is required for this area.

MRS-13A. MRS-13A includes portions of Parcels E4.6.1, E4.6.2, L5.6.1, and L5.6.2 (Plate 5 [Attachment 1]). MRS-13A was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-13A. MRS-13A meets Track 1, Category 2¹⁰ criteria because historical research and sampling conducted at this site identified evidence of past training involving military munitions items that do not pose an explosive hazard. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-13A.

MRS-13A overlies a portion of the OU2 Landfills (Area A; Plate 5 [Attachment 1]). The southwestern portion of MRS-13A includes a portion of Area A excavated in 1996 through 1998, as part of the relocation of the landfill material buried in Area A. All landfill disposal areas, including land within the MRS-13A footprint, have been fully excavated and the excavated areas have been backfilled or re-graded. Military munitions items were found and removed from landfill materials excavated from MRS-13A; however, the items are attributed to disposal based on the proximity to the landfill and the type of training identified on historic maps in this area. Accordingly, Area A has been identified as a "Special Case" Track 0 Area as defined in the Track 0 ROD (*June 2002*) and the Track 0 ROD Explanation of Significant Differences (ESD) (*April 5, 2005*). The DTSC and the US EPA signed the Track 0 ROD ESD on April 12, 2005 and April 26, 2005, respectively.

MRS-20. MRS-20 lies within Parcel E15.2 (Plate 3 [Attachment 1]). MRS-20 was evaluated in the Track 1 OE RI/FS. MRS-20 meets the Track 1, Category 1¹¹ criteria because historical research and sampling conducted at this site found no evidence of past training involving military munitions. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-20.

MRS-22. MRS-22 includes Parcels L20.15, S3.1.1, S3.1.2, S3.1.3, and S3.1.4 (Plates 8 and 9 [Attachment 1]). MRS-22 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-22. MRS-22 meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of practice and pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-22.

As an added precaution, the DTSC and the California Department of Parks and Recreation will enter into a Memorandum of Understanding (MOU) for additional site surveillance activities on MRS-22. The MOU will be implemented to inspect the beach property for the presence of MEC items periodically and after erosion-inducing events. The MOU will also call for proper notification in the case of any discovery of MEC items (or potential MEC items) during these inspections.

¹⁰ Category 2: The site was used for training, but the military munitions items used do not pose an explosive hazard.

¹¹ Category 1: There is no evidence to indicate military munitions were used at the site.

MRS-27Y. MRS-27Y lies partially within Parcels E11a, L20.14.1.1, and L20.14.2 (Plate 6 [Attachment 1]). MRS-27Y was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-27Y. MRS-27Y meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-27Y.

MRS-49. MRS-49 lies partially within Parcels E20c.2.1, L23.5.1 and L31 (Plate 3 [Attachment 1]). MRS-49 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-49. MRS-49 meets the Track 1, Category 3 criteria because historical research and site walks conducted at this site identified evidence of past training involving military munitions and training at this site involved only the use of practice and pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-49.

MRS-59A. MRS-59A includes Parcel E11b.6.2 (Plate 7 [Attachment 1]). MRS-59A was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-59A. MRS-59A meets the Track 1, Category 3 criteria because historical research, site walks, and surface sampling conducted at this site identified evidence of past training involving only the use of pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-59A.

MRS-62. MRS-62 includes Parcel L20.6 (Plate 10 [Attachment 1]). MRS-62 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-62. MRS-62 meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions and training at this site involved only the use of pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-62.

MRS-66. MRS-66 lies partially within Parcel E11a (Plate 6 [Attachment 1]). MRS-66 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-66. MRS-66 meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions, and training at this site involved only the use of practice and pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-66.

As specified in the Track 1 ROD and the Track 1 Plug-In Approval Memorandum for the MRS-6 Expansion Area, the Army recommends construction personnel involved in intrusive operations at the following sites attend the Army's "ordnance recognition and safety training," MRS-1, MRS-6, and the MRS-6 Expansion Area, MRS-13A, MRS-22, MRS-27Y, MRS-49, MRS-59A, MRS-62, and MRS-66.

Site Reconnaissance of Parcels E20c.2.1, L23.5.1, L31, E11b.6.2, L20.6, and E11a

As part of the BRA, a site reconnaissance was performed over portions of Parcels E20c.2.1, L23.5.1, L31, E11b.6.2, L20.6, and E11a. No MEC or munitions debris items were found within these parcels during the BRA site reconnaissance. Additional information on the BRA investigation is provided in Section 4.2.3.

Site Walk of Parcel E2a

A site walk was conducted in 2004 to address gaps in information collected during previous sampling efforts in the vicinity of MRS-1 and MRS-6. The site walk was conducted by a UXO Safety Specialist using a magnetometer to detect buried anomalies. The area walked included MRS-6, a portion of Parcel E2a between MRS-6 and MRS-1, and very northern portion of MRS-1. The only munitions debris items found during the site walk were two expended practice mine fuzes and an expended firing device (M1-type), which are consistent with the type of munitions debris found at MRS-1 and MRS-6 during the sampling conducted at those sites.

Military munitions response program investigations indicate that it is not likely that MEC are located on the Property; however, there is a potential for MEC to be present because military munitions were used throughout the history of Fort Ord. The deed will contain a notice of the potential for the presence of MEC as stated in the Environmental Protection Provisions (Attachment 5).

4.9.1 Incidental Military Munitions

Incidental military munitions items were found in seven parcels that are in this FOST. These items are considered to be "incidental" because their presence was anomalous and not indicative of past military munitions training activities on these parcels. Accordingly, the definition of "Track 0" has been clarified in the *Explanation of Significant Differences, Final Record of Decision, No Action Regarding Ordnance-Related Investigations (Track 0 ROD), Former Fort Ord, California (April 5, 2005)* to include areas not suspected as having been used for military munitions-related activities of any kind, but where incidental military munitions have been discovered. A description of the discovery of incidental military munitions at each parcel is provided below.

Parcels E4.3.1.2, E4.6.1, E4.6.2, L5.6.1 and L5.6.2 – During the excavation and placement of underground piping associated with the OU2 Landfills groundwater treatment system munitions debris items and MEC items were found on Parcels E4.3.1.2, E4.6.1, E4.6.2, L5.6.1, and L5.6.2. With the exception of one of the items (an inert 3.5-inch rocket motor), all were found within or adjacent to the landfill excavation boundaries during construction activities. As documented in the *Technical Memorandum, Support Documentation, Potential OE Issues, Parcel E4.3.1, Finding of Suitability for Early Transfer, Housing Areas and Former East Garrison Parcels, Former Fort Ord, California, May 2, 2001*, available documentation indicates these items were discarded in the former OU2 Landfills (Area A) during previous landfill operations and are not associated with any training in this area. The inert 3.5-inch rocket motor was found along Imjin Road, within Parcel E4.6.2, at a depth of 2 feet below the ground surface and may have been buried during grading activities.

The intended reuse of Parcel E4.3.1.2 is residential development, and as part of construction activities for this development the OU2 Landfills groundwater treatment system piping and other utilities within the parcel will be excavated and relocated. A representative of the Army trained in MEC recognition will observe initial grading and excavation activities that are within Parcel E4.3.1.2, associated with the system piping and utility relocation, and part of the initial planned development occurring within the parcel after its transfer. In accordance with the Environmental Protection Provisions (Attachment 5), if the Army representative or any other person should find suspected MEC during these activities, they will immediately stop any intrusive or ground-disturbing work in the area or in any adjacent areas and will immediately notify the appropriate authority so that explosive ordnance disposal personnel can be dispatched to address such MEC, as required under applicable law and regulations.

Parcel E8a.1.1.2 - Several military munitions items have been discovered within this parcel. The items were primarily expended practice items (munitions debris) and found scattered mostly in the northwestern portion of the parcel. Three MEC items (practice antitank mine, grenade fuze, and a practice grenade) were also found. These items are considered to be associated with disposal at the OU2 Landfills and not with any training in this area.

To address regulatory agency concerns regarding the occurrence of incidental military munitions observed on Parcel E8a.1.1.2, a site walk was performed to provide additional information. On June 15, 2005, a USACE UXO Safety Specialist conducted a site walk with a Schonstedt GA-52CX magnetometer, while a Global Positioning System operator recorded the path walked. All anomalies were intrusively investigated. No MEC or munitions debris items were found during the walk; brass casing from small arms ammunition were observed. Therefore, presence of the incidental items found previously on this parcel are not indicative of past training and this parcel meets the definition of Track 0 as defined in the Track 0 ESD.

Parcel L20.13.5 - In March of 2002, staking and surveying activities were being conducted along South Boundary Road to support widening of the road from General Jim Moore Boulevard to York Road. During this activity, the cartridge case from a 40mm multi-projectile with a live primer (MEC) was discovered adjacent to the road on Parcel L20.13.5. The item was reported to the on-call UXO Safety Officer who responded to the incident. The item was inspected and deemed safe to remove (cartridge case was damaged and the projectiles were missing), and transported to a safe holding area for later disposal. No other evidence of military munitions was discovered during the South Boundary Road widening project. Because the cartridge case was damaged and found lying adjacent to South Boundary Road, it is believed to have been discarded at this location and not present as the result of training activities.

4.9.2 Findings and Recommendations

The potential exists for MEC to be present on the Property because they were used throughout the history of Fort Ord. An appropriate MEC notice is given herein and will be included in the deed. The deed will include the MEC warning and covenant included in the Environmental Protection Provisions (Attachment 5, Section 3).

The Army cannot guarantee that all MEC have been removed; therefore, the Army recommends reasonable and prudent precautions be taken when conducting intrusive operations on the Property and will, at its expense, provide construction worker MEC recognition training.

Pursuant to an agreement with the DTSC, the Cities of Marina, Seaside, and Del Rey Oaks have adopted City Ordinances that address the potential MEC risk by requiring permits for certain excavation activities. The Cities of Seaside, Marina, and Del Rey Oaks have designated all real property within their respective land use jurisdictions, which was formerly part of Fort Ord and identified as the possible location of MEC, as an "Ordnance Remediation District" ("District").

4.10 Installation-Wide Multispecies Habitat Management Plan

In accordance with the Installation-Wide Multispecies Habitat Management Plan (HMP), parcels in this FOST are categorized as follows:

Development Parcels – E15.2, E20c.2.1, E4.1.2.1, E4.1.2.2, E4.1.2.3, E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, L5.6.1, L5.6.2, L9.1.1.2, L9.1.2.2, L20.13.5, L20.14.1.1, L20.14.2, L20.15, L20.6, L23.5.1, L31, and S3.1.4.

Habitat Reserve Parcels – E11a, E11b.6.2, and S3.1.2.

Development with Reserve Areas or Development with Restrictions Parcels – E2a, E8a.1.1.2, S3.1.1, S3.1.3, and S4.1.1.

The resource conservation and management requirements for Habitat Reserve Parcels and Development with Reserve Areas or Development with Restrictions Parcels are described in the April 1997 HMP and in the *Assessment East Garrison – Parker Flats Land Use Modifications, Fort Ord California, May 1, 2002*.

The parcels identified as HMP Development Parcels have no HMP resource conservation or management requirements; however, the HMP does not exempt the Grantee from complying with environmental regulations enforced by federal, State, or local agencies. These regulations may include obtaining permits from the U.S. Fish and Wildlife Service (USFWS) as required by the Endangered Species Act (ESA); complying with prohibitions against the removal of listed plants occurring on federal land or the destruction of listed plants in violation of any state laws; complying with measures for conservation of state-listed threatened and endangered species and other special-status species recognized by the California ESA, or California Environmental Quality Act (CEQA); and complying with local land use regulations and restrictions. The deed will include the "Notice Of The Presence Of Threatened And Endangered Species" provided in the Environmental Protection Provisions (Attachment 5).

4.11 Other Property Conditions

Clean Air Act General Conformity Rule requirements for this transfer were satisfied by a Record of Non-Applicability based upon an exemption for property transfers or leases where the proposed action will be a transfer of ownership, interest and title in the land, facilities, and associated real and personal property.

5.0 ADJACENT PROPERTY CONDITIONS

The following other potentially hazardous conditions exist on adjacent property:

5.1 Operable Unit 2 (OU2) Landfills

Portions of the Property (Parcels E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1, and L5.6.2) are located within 1,000 feet of the Operable Unit 2 (OU2) Landfills (Plate 6 [Attachment 1]). Parcel E8a.1.1.2 is located immediately to the south of and adjacent to the OU2 Landfills (Area E) (Plate 6, Attachment 1). The selected remedial action presented in the OU2 Landfills ROD (*July 15, 1994*) included placement of an engineered cover system over buried refuse at the OU2 Landfills. Placement of the engineered cover system at the OU2 Landfills was completed in December 2002.

California Integrated Waste Management Board (CIWMB) regulations (Title 27 California Code of Regulations [CCR]), require that methane concentrations do not exceed the lower explosive limit (LEL) of five percent at the landfill boundary. In addition, trace gases must be controlled to prevent adverse acute and chronic exposure to toxic and/or carcinogenic compounds. To evaluate methane levels and trace gases in soil adjacent to the OU2 Landfills in accordance with CIWMB requirements, permanent monitoring probes were installed within the OU2 Landfills and around the OU2 Landfills perimeter at a spacing of 1,000 feet or less. The Army has conducted quarterly monitoring at perimeter probes since June 2000, as described in the Landfill Gas Perimeter Probe Monitoring Reports (February 2002, October 2002, April 2004 and November 2004). The latest available results from the quarterly methane monitoring (March through December 2003) showed methane concentrations to be below the five percent standard at the landfill boundary. It is expected that the concentrations of methane will decline in the future as the waste ages and the rate of biological degradation decreases. Results from the 2003 annual monitoring for volatile organic compounds (VOCs) indicates VOCs were mostly non-detectable to the reporting limit. The VOCs most frequently detected since June 2000 include vinyl chloride, benzene, Freon 11, Freon 12, Freon 113, and Freon 114. Permanent perimeter probes are located on Area E of the OU2 Landfills adjacent to Parcel E8a.1.1.2 (SGP-1E, SGP-2E and SGP-3E) and within Parcel E8a.1.1.2 (SGP-5E and SGP-6E). These probes are monitored quarterly for methane. Historically, methane has been detected in SGP-1E and SGP-2E, but not in SGP-3E, SGP-5E or SGP-6E. SGP-2E and SGP-5E are also monitored annually for VOCs. In 2003, acetone, carbon disulfide, Freon 114, Freon 12 and Tetrachloroethene were detected in both probes. Additionally, Freon 11 was detected in SGP-5E. To monitor for potential impacts of toxic and/or carcinogenic trace gases contained in landfill gas (LFG), the Army also conducted ambient air monitoring in 2000, 2001, 2002, and 2003 for VOCs as reported in the *Draft Final Report, 2003 Ambient Air Monitoring and Human Health Risk Assessment, Operable Unit 2 Landfills, Former Fort Ord, California* (Revision 0, March 2005). The results of the Human Health Risk Assessment (HHRA) are described below.

In June 2001, the Army implemented a LFG extraction and treatment system along the eastern side of the OU2 Landfills Area F adjacent to the existing California State University Monterey Bay (CSUMB) housing. This system has reduced and maintained methane concentrations along the fence line adjacent to the eastern side of Area F to less than the five percent standard. To further reduce potential migration of VOCs from the OU2 Landfills to the underlying groundwater and potential emissions of VOCs to the atmosphere, the Army is expanding the network of LFG extraction wells to include the northern, western and southern perimeters and interior of Area F. The new system will extract and treat both methane and VOCs through use of a thermal treatment unit. In its current configuration, the treatment system uses granular

activated carbon and potassium permanganate to treat VOCs; however, this is not effective for removing methane. The system expansion is described in the *Draft Final Work Plan, Landfill Gas System Expansion, Operable Unit 2 Landfills, Former Fort Ord, California* (Revision 0, March 2005). The Army estimates construction will be complete and the expanded system brought on line by January 2006.

To decrease the potential for LFG migration to surrounding property, a buffer zone was added extending 100 feet beyond the perimeter fencing for most of the OU2 Landfills Areas (Plate 6 [Attachment 1]). Future landowners should refer to Title 27, Section 21190 CCR, which identifies protective measures for structures built on or within 1,000 feet of a landfill.

The Army conducted a screening human health risk assessment (HHRA) to evaluate the potential health risks associated with potential residential exposure to VOCs in ambient air in the vicinity of the OU2 Landfills. Ambient air monitoring data collected in 2000, 2001, 2002, and 2003 was used in the HHRA. Based on the results of the HHRA, it was determined that no further corrective action was necessary to address risks or hazards from VOCs potentially emanating from the OU2 Landfills (SWMU FTO-002). The US EPA provided comments to the Draft HHRA in a letter dated November 8, 2004, in which it was concurred that the OU2 Landfills are not contributing significantly to VOC concentrations in ambient air downwind of the OU2 Landfills. The DTSC provided comments in a memorandum dated November 17, 2004, in which the DTSC concurred that risks upwind and downwind of the OU2 Landfills are approximately equal.

Site closure has been recommended for the OU2 Landfills. Documentation required for the regulatory agencies to approve site construction completion and site completion as defined under CERCLA was provided in the *Draft Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, Former Fort Ord, California, March 2003, Revision C*. The California Regional Water Quality Control Board, Central Coast Region (RWQCB) provided comments on and approval of the report in a letter dated April 25, 2003. The letter also stated the RWQCB would be changing the OU2 Landfills permitting to reflect its closed status. On January 10, 2005, the US EPA and the DTSC gave verbal approval to issue the Draft Final Remedial Action Construction Completion Report in accordance with the Federal Facilities Agreement schedule. The draft final document, dated January 31, 2005, was issued on February 2, 2005. The regulatory agencies had no additional comments and the document became final in March 2005 in accordance with the provisions of the Fort Ord FFA (*November 19, 1990*). Additional information regarding the OU2 Landfills is provided in Sections 4.1.4, 4.2.1, and 4.2.2.

5.2 Munitions and Explosives of Concern (MEC)

MRS-2, MRS-24B, MRS-31, MRS-44EDC, MRS-45, MRS-50EXP, and MRS-59 lie adjacent to the Property. A summary of the investigation conducted at each of the adjacent sites is provided below.

MRS-2. MRS-2 lies approximately 100 feet west of Parcel E4.6.1 (Plate 5 [Attachment 1]). MRS-2 was identified in the ASR as a chemical training area and a landmine warfare training area. Results of the ASR indicate that MRS-2 was not an impact area. During the archives search it was reported that Chemical Agent Identification Sets (CAIS) might have been buried in

the site vicinity along Imjin Road. MRS-2 was sampled for munitions and explosives of concern (MEC) in 1994 and two munitions debris items were found. A portion of MRS-2 overlaps IRP Site 16 and is adjacent to IRP Site 17. During the investigation and remediation of IRP Sites 16 and 17, 468 2.36-inch inert practice rockets were removed from burial pits located in former landfill areas within Sites 16 and 17. Landfill areas within MRS-2 were fully excavated in 1997. Although munitions debris items were found at MRS-2, the items were buried in disposal pits and were not associated with military munitions use. No evidence of CAIS kits was found during sampling. The burial area within MRS-2 has been excavated, backfilled and re-graded. As discussed in the Track 0 ROD (*June 19, 2002*), the portion of MRS-2 that has been excavated, backfilled and re-graded (Pete's Pond) is a Special Case Track 0 area. The Track 0 ROD approved No Action regarding munitions response for this Special Case Track 0 area. The Special Case Track 0 area included the former landfill within MRS-2 where munitions debris was found buried with refuse. No military munitions-related activities occurred in the area, and the munitions debris and the refuse were entirely removed.

MRS-2 was categorized as a Track 1 site, which are sites suspected to have been used for military training with military munitions. Historical research and sampling conducted at this site found no evidence of past training involving military munitions. The adequacy of the sampling conducted at MRS-2 was evaluated in the Track 1 OE RI/FS. The Track 1 OE RI/FS recommended that MRS-2 should be retained in the Track 1 process. Therefore, MRS-2 will be considered as a candidate site for the Track 1 Plug-in process in accordance with criteria identified in the approved Track 1 ROD.

MRS-5. MRS-5 lies adjacent to Parcel Ellb.6.2 (Plate 7 [Attachment 1]). MRS-5 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-5. MRS-5 meets the Track 1, Category 3 criteria because historical research and surface sampling conducted at this site identified evidence of past training involving only practice and pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-5.

MRS-13A. MRS-13A lies adjacent to Parcels E4.3.1.2 and E8a.1.1.2 (Plate 5 [Attachment 1]). MRS-13A was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-13A. MRS-13A meets the Track 1, Category 2 criteria because historical research and sampling conducted at this site identified evidence of past training involving military munitions items that do not pose an explosive hazard. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-13A.

MRS-24B. MRS-24B lies approximately 300 feet southwest of Parcel E20c.2.1 (Plate 3 [Attachment 1]). MRS-24B was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-24B. MRS-24B meets the Track 1, Category 3 criteria because historical research and sampling investigations identified evidence of past training involving military munitions, and training at this site involved only the use of practice and pyrotechnic items that are not designed to cause injury. In accordance with the Track 1 ROD, no further action related to MEC is required at MRS-24B.

MRS-31. MRS-31 is separated from Parcel E8a.1.1.2 by Inter-Garrison Road and lies adjacent to Inter-Garrison Road Parcel L20.14.2 (Plate 6 [Attachment 1]). MRS-31 is a general area where training occurred and encompasses several munitions response sites including MRS-4C,

MRS-7, MRS-8 and MRS-18. The boundary of MRS-31 was established to correspond to the transfer parcel boundary and to include each of the munitions response sites. HFA completed the initial investigation of MRS-31 in 1994. Removals of military munitions to three and four feet below ground surface have been conducted throughout MRS-31. MEC and munitions debris items found during the military munitions removal actions conducted at these sites included rifle-fired smoke grenades, fuzes, firing devices, blasting caps, simulators, illumination signals, practice hand and smoke grenades, practice mines, projectiles, and practice rockets. Site MRS-31 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program

MRS-44EDC. MRS-44EDC lies approximately 400 feet southeast of Parcel E20c.2.1 (Plate 3 [Attachment 1]). MRS-44EDC was established based on the presence of fragmentation from 37mm HE projectiles found during a site reconnaissance conducted by a USACE UXO Safety Specialist. An investigation of MRS-44EDC was conducted to determine whether a removal action was warranted. The investigation included the sampling of grids randomly distributed throughout the site. Several MEC items were found during sampling at MRS-44EDC; however, none of the MEC items found are penetrating by design and would therefore typically be found on or near the ground surface unless intentionally buried. MRS-44EDC will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

MRS-45. The site, approximately 400 acres, lies adjacent to Inter-Garrison Road Parcels L20.14.1.1 and L20.14.2 (Plate 6 [Attachment 1]). CMS Environmental, Inc. (CMS) conducted sampling of MRS-45 in 1997. Two hundred and twenty-five munitions debris items were removed. With the exception of a fragment from a fragmentation hand grenade, all of the munitions debris items were pyrotechnic or training related and included rifle-fired smoke grenades, two 40mm projectile signals, practice, illumination, and smoke hand grenades, illumination signals, practice mines, hand grenade fuzes, booby trap firing devices, and a smoke pot. Twelve MEC items (all pyrotechnic or training related items) were found during sampling of the site. No evidence was found during sampling to indicate that this site was used as an impact area and no further military munitions investigation was recommended. MRS-45 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

MRS-46. This site lies immediately adjacent to South Boundary Road Parcel L20.13.5 (Plate 8 [Attachment 1]). The boundary of MRS-46 is based on transfer parcel delineation and not on evidence of munitions use. Sampling of MRS-46 was initially conducted as part of the investigation of the adjacent impact area. During the sampling two MEC items (2.36-inch rockets) were found on the ground surface. The contractor conducting the sampling concluded that the two rockets were discarded military munitions (DMM); however, sampling of the entire site was conducted. No MEC were found during this sampling effort. Ten munitions debris items (various portions of practice rifle grenades) were found and removed. Because a portion of MRS-46 was to be leased to York School for the construction of an athletic field, the entire lease area was re-evaluated (sampled) using digital geophysical equipment. No MEC or munitions debris were discovered and no further action was recommended. A digital geophysical evaluation (sampling) was also performed to the south of MRS-46 between South boundary Road and the former Fort Ord installation boundary (Plate 8). This area was identified as the York School South Area. The investigation included a visual sweep and subsurface investigation

using digital geophysical equipment. No MEC was found during sampling. Three munitions debris items (pieces of practice rifle grenades) were found and removed. Based on these results, no further action was recommended. MRS-46 and the York School South Area will undergo additional evaluation in the ongoing Fort Ord Military Munitions Response Program.

In 2002, York School completed construction of an athletic field and installation of an irrigation well within the portion of MRS-46 leased to them by the Army. The construction of the athletic field and installation of an underground irrigation system involved significant earth moving and grading. No military munitions were found during the athletic field construction, or installation of the irrigation well and irrigation system.

MRS-50EXP. MRS-50EXP is located approximately 500 feet west of Parcel L23.5.1 (Plate 3 [Attachment 1]). MRS-50EXP was not initially identified as a MRS in the ASR, but was created due to the expansion of the removal area associated with MRS-50. MEC and munitions debris were found at the boundary of MRS-50, which warranted an expansion of the investigation area in all directions. MRS-50EXP and the adjacent sites now comprise the Parker Flats munitions response area (Parker Flats MRA). The investigation of MRS-50 and its expansion areas included a removal action conducted over the entire site to a depth of 4 feet below ground surface. During the removal, 425 MEC items were found and removed from MRS-50EXP. No high explosive or penetrating military munitions were found within approximately 900 feet of Parcel L23.5.1. Approximately 500 hundred feet of open space and Parker Flats Road separates Parcel L23.5.1 from MRS-50EXP. Five military munitions items were found within MRS-50EXP approximately 600 feet from the eastern boundary of Parcel L23.5.1. The items, two practice hand grenade fuzes (MEC), a 40mm smoke projectile (MD), a rifle-fired parachute signal (MD), and a grenade fuze (MD), were found during the sampling of MRS-50EXP grids located on the east side of Parker Flats Road. The practice hand grenade fuzes were classified as discarded military munitions (DMM) items by the contractor conducting the military munitions sampling and removal. Because the MEC items found adjacent to Parker Flats Road were determined to be DMM further sampling on the west side of Parker Flats Road was not warranted. The Parker Flats MRA is currently being evaluated in the Track 2 Munitions Response Remedial Investigation/Feasibility Study.

MRS-59. MRS-59 lies adjacent to Parcel E11b.6.2 (Plate 7 [Attachment 1]). MRS-59 was identified during interviews conducted during the PA/SI phase of the Fort Ord Archives Search and was reported to have included a 2.36-inch rocket range in the early 1940s. A portion of MRS-59 was transferred to the Bureau of Land Management (BLM) in 1996 and the remainder was retained by the Army. The remaining portion was re-named as MRS-59A. The reconnaissance of MRS-59 involved walking a portion of the site and sweeping the path walked using a magnetometer. Two pieces of mortar fragments from the incomplete detonation of a 60mm mortar were found on the far west side of MRS-59 approximately 3000 feet from Parcel E11b.6.2. Expended pyrotechnic items were also found. Based on the reconnaissance performed, the ASR recommended further site investigation and random sampling at MRS -59. MRS-59 will undergo additional evaluation in the ongoing former Fort Ord Munitions Response Program.

Portions of MRS-59 were investigated as part of the BRA for small arms and multi-use ranges. The assessment of MRS-59 for potential hazardous and toxic waste-related contamination

included a data review, site reconnaissance, and mapping of portions of the site. Under the BRA MRS-59 was identified as HA-189. Additionally, Portions of MRS-59 were included within two other historical areas, HA-77 and HA-88; however, only walks associated with HA-77 occurred within MRS-59. No MEC items were found and no evidence of military training was observed during the site reconnaissance conducted at HA-77 and HA-189 (MRS-59A). No further investigation for chemical contamination was recommended for HA-189 (MRS-59) under the Fort Ord BRA.

MRS-DRO.1 and MRS-DRO.2. These sites lie on the north side of South Boundary Road and are in close proximity to Parcel L20.13.5 (Plate 8 [Attachment 1]). The boundaries of MRS-DRO.1 and MRS-DRO.2 are based on transfer parcel delineation and not on evidence of munitions use. The investigation of these sites included one hundred percent (100%) grid sampling, a removal action, and a 100% geophysical investigation to support the early transfer of these parcels. Items found and removed included expended practice rockets, practice projectiles, and practice grenades. MRS-DRO.1 and MRS-DRO.2 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

MRS-MOCO.1. This site lies on the north side of South Boundary Road and is adjacent to Parcel L20.13.5 (Plate 8 [Attachment 1]). The boundary of MRS-MOCO.1 is based on transfer parcel delineation and not on evidence of munitions use. One hundred percent (100%) grid sampling was performed at MRS-MOCO.1 and no MEC or munitions debris were found. Based on these results no further action was recommended. MRS-MOCO.1 will undergo additional evaluation in the ongoing former Fort Ord Military Munitions Response Program.

6.0 ENVIRONMENTAL REMEDIATION AGREEMENTS

The following environmental remediation orders and agreements are applicable to the Property: The Fort Ord MR RI/FS and the Fort Ord Federal Facility Agreement (FFA; *November 19 1990*). All remediation activities on the Property required by the FFA are completed or in place and operating properly and successfully (OPS). The Environmental Protection Provisions (Attachment 5) and deed will include a provision reserving the Army's right to conduct remediation activities and the regulators' right of access.

7.0 REGULATORY/PUBLIC COORDINATION

The US EPA Region IX and the DTSC were notified of the initiation of this FOST. The 30-day review period was from May 31, 2005 to June 30, 2005. Regulatory/public comments received during the public comment period were reviewed and incorporated, as appropriate. A copy of the regulatory/public comments and the Army Response are included in Attachments 7 and 8, respectively. Certain comments from US EPA (Attachment 7) remain unresolved and are identified as such in the Army Response (Attachment 8).

8.0 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA). The results of this analysis are documented in the *Final Environmental Impact Statement Fort Ord Disposal And Reuse (June 1993)*, associated Record of Decision (*December 1993*), *Supplemental*

Environmental Impact Statement Fort Ord Disposal And Reuse (June 1996) and associated Record of Decision (*June 1997*). Encumbrances¹² identified in the NEPA analysis as necessary to protect human health or the environment are summarized in Table 8 – Disposal (Army Action) Impacts and Mitigation Measures (Attachment 3).

9.0 ENVIRONMENTAL PROTECTION PROVISIONS

Based on the above results from the CERFA Report and other environmental studies, and in consideration of the intended use of the Property, certain terms and conditions are required for the proposed transfer. The terms and conditions are set forth in the Environmental Protection Provisions (Attachment 5) and will be included in the deed/easement.

9.1 Covenants to Restrict Use of Property – Environmental Restrictions

A portion of the former Fort Ord installation lies within a “Special Groundwater Protection Zone” as defined by Monterey County Ordinance 04011. Use of groundwater is prohibited on portions of the Property as described in the Covenant to Restrict Use of Property – Environmental Restrictions (Special Groundwater Protection Zone) (CRUP). Provided the restrictions of the CRUP, to be entered into by the Army and the State of California, are adhered to, no actual or potential hazard exists on the surface of the Property from groundwater contamination or from possible soil gas volatilization resulting from groundwater contamination underlying the Property.

9.2 School Properties

Should this Property be considered for the proposed acquisition and/or construction of school properties utilizing State funding, a separate environmental review process in compliance with the California Education Code 17210 et. Seq. will need to be completed and approved by the DTSC.

10.0 FINDING OF SUITABILITY TO TRANSFER

For ECP Category 1 Parcels:

Based on the information above, I conclude that the portion of the Property in ECP Category 1 qualifies as CERCLA §120(h)(4) uncontaminated property and is transferable under that section. In addition, all Department of Defense requirements to reach a Finding of Suitability to Transfer have been met, subject to the terms and conditions in the Environmental Protection Provisions that shall be included in the deed for the property. The deed will include the CERCLA 120(h)(4) Notice, Covenant, and Access Provisions and Other Deed Provisions, including a clause granting the US EPA and the DTSC access to the Property in any case in which a response or corrective action is found to be necessary after the date of transfer. Whereas no hazardous substances or petroleum products were stored for one year or more, known to have been released, or disposed of on the parcel, a hazardous substance or petroleum notification is not required.

¹² For the purposes of the FOST, “encumbrances” include mitigations (to be implemented by the Army) necessary to protect human health and the environment from impacts associated with the disposal of property at the former Fort Ord.

For ECP Category 2 Parcels:

The portion of the Property in ECP Category 2 has been identified as real property on which no hazardous substances were released or disposed of, but on which petroleum products or their derivatives are known to have been released or disposed of. Notice is hereby provided that diesel fuel was released from a 4,000-gallon underground storage tank on the Property, which was operated from approximately 1976 to 1990.

Based on the above information, I conclude that all response actions necessary to protect human health and the environment with respect to any petroleum product remaining on the Property have been taken prior to the date of this conveyance. In addition, all Department of Defense (DOD) requirements to reach a Finding of Suitability to Transfer have been met for the Property, subject to the terms and conditions set forth in the Environmental Protection Provisions (Attachment 5) that shall be included in the deed for the Property. The deed will also include the Notice of Release or Disposal of Petroleum Products, Covenant, and Access Provisions and Other Deed Provisions, including a clause granting the US EPA and the DTSC access to the Property in any case in which a response or corrective action is found to be necessary after the date of transfer. Finally, the petroleum product notification (Table 7 – Notification of Petroleum Product Storage, Release, or Disposal [Attachment 3]) shall be included in the deed as required under DOD FOST Guidance.

For ECP Category 3 and 4 Parcels:

Based on the above information, I conclude that all removal or remedial actions necessary to protect human health and the environment have been taken and the portion of the Property in ECP Categories 3 and 4 is transferable under CERCLA section 120(h)(3). In addition, all Department of Defense requirements to reach a Finding of Suitability to Transfer have been met for the Property, subject to the terms and conditions set forth in the Environmental Protection Provisions (Attachment 5) that shall be included in the deed for the Property. The deed will also include the CERCLA 120(h)(3) Notice, Covenant, and Access Provisions and Other Deed Provisions, including a clause granting the US EPA and the DTSC access to the Property in any case in which a response or corrective action is found to be necessary after the date of transfer. Finally, the hazardous substance notification (Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal [Attachment 3]) shall be included in the deed as required under the CERCLA Section 120(h) and DOD FOST Guidance.

AUG 15 2005

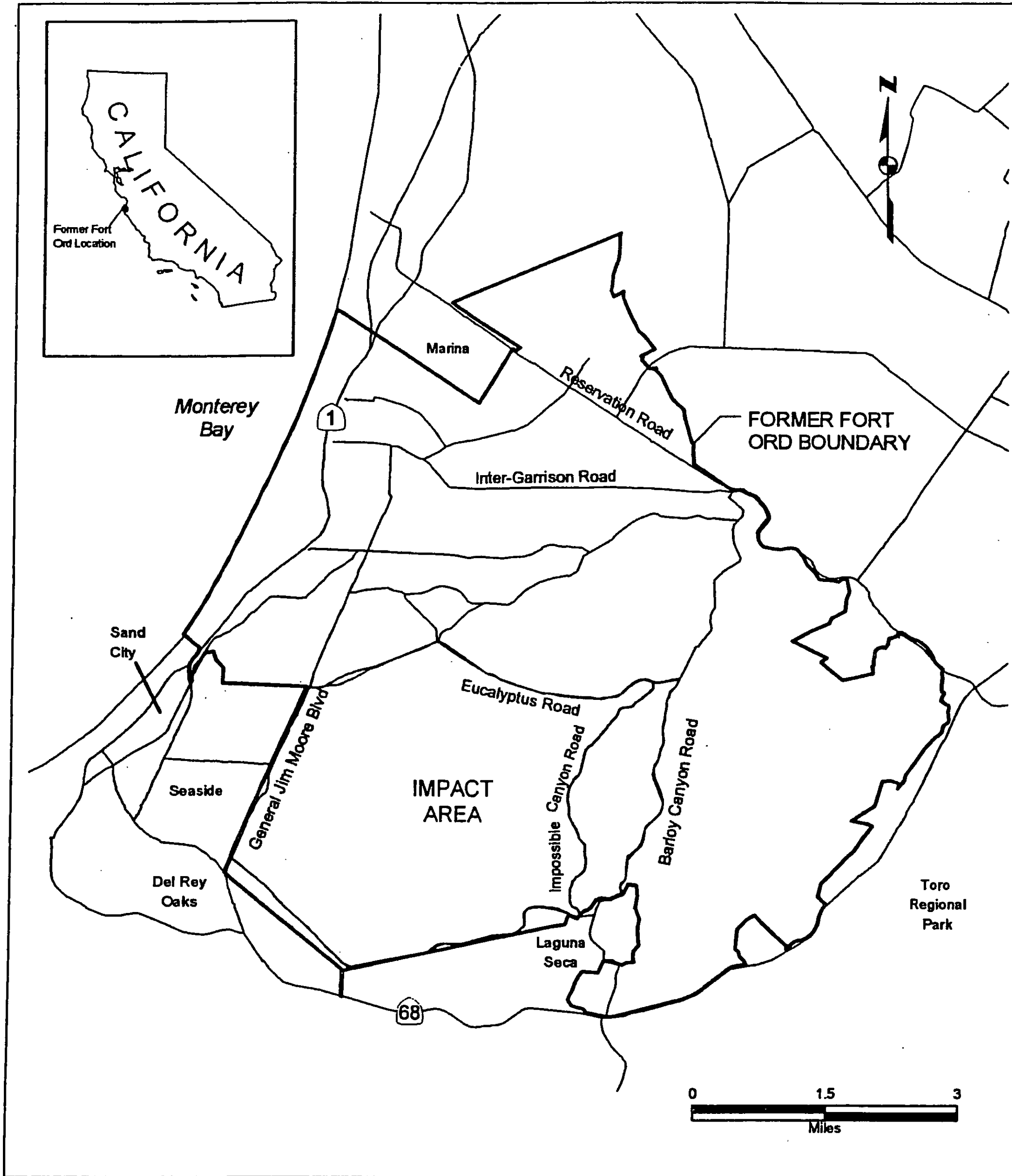


Thomas E. Lederle
Director, Hampton Field Office
Army BRAC

AUG 15 2005

ATTACHMENT 1

SITE MAPS OF PROPERTY



Track0_C-fig1.mxd - 7/25/05

PLATE

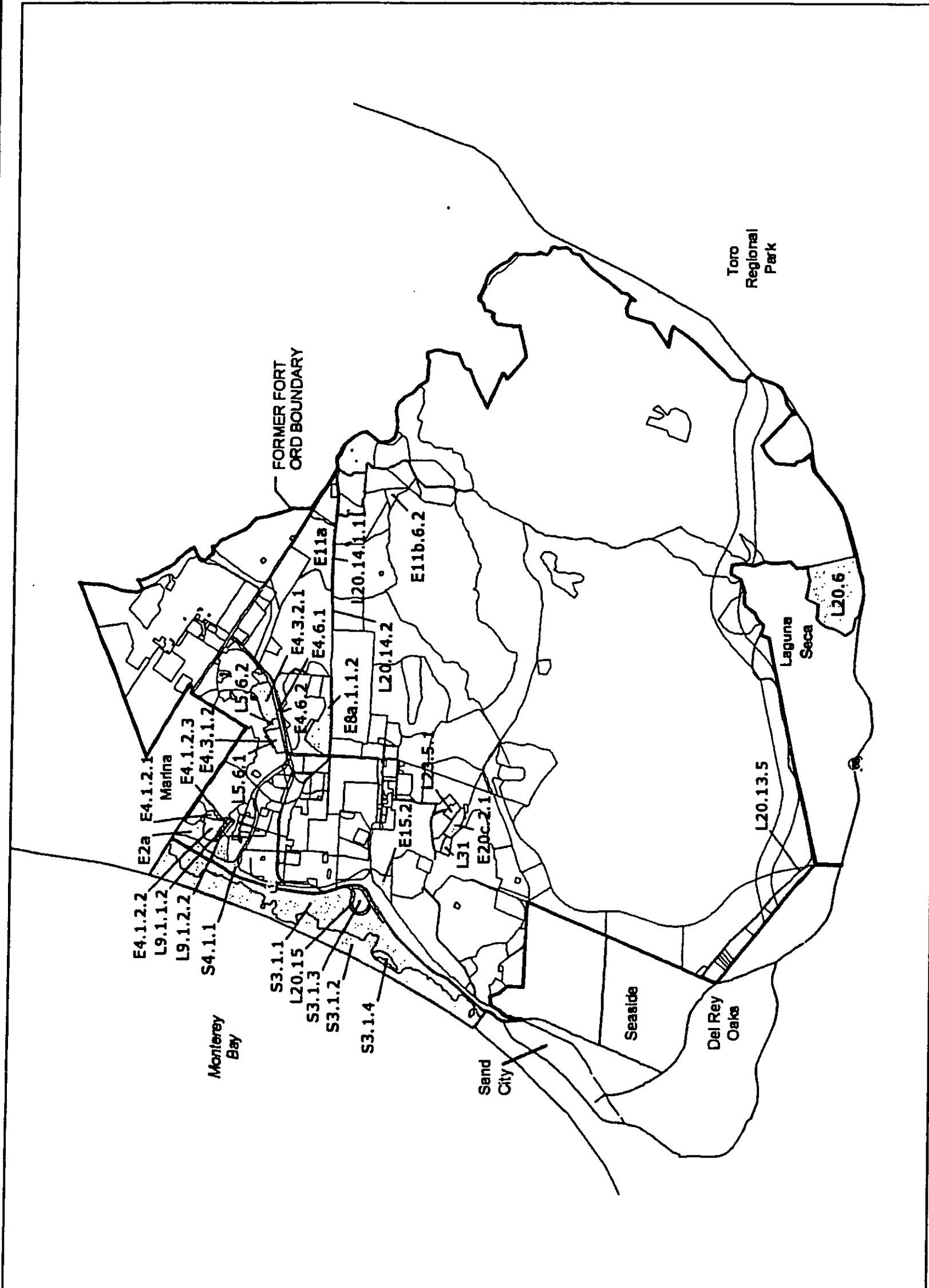


Site Location Map
 Finding of Suitability to Transfer
 Track 0 Plug-In C, Track 1 And
 Track 1 Plug-In Parcels
 Former Fort Ord, California


1

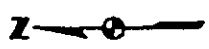
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Exhibit 'B'



EXPLANATION

-  TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1 PLUG-IN PARCEL



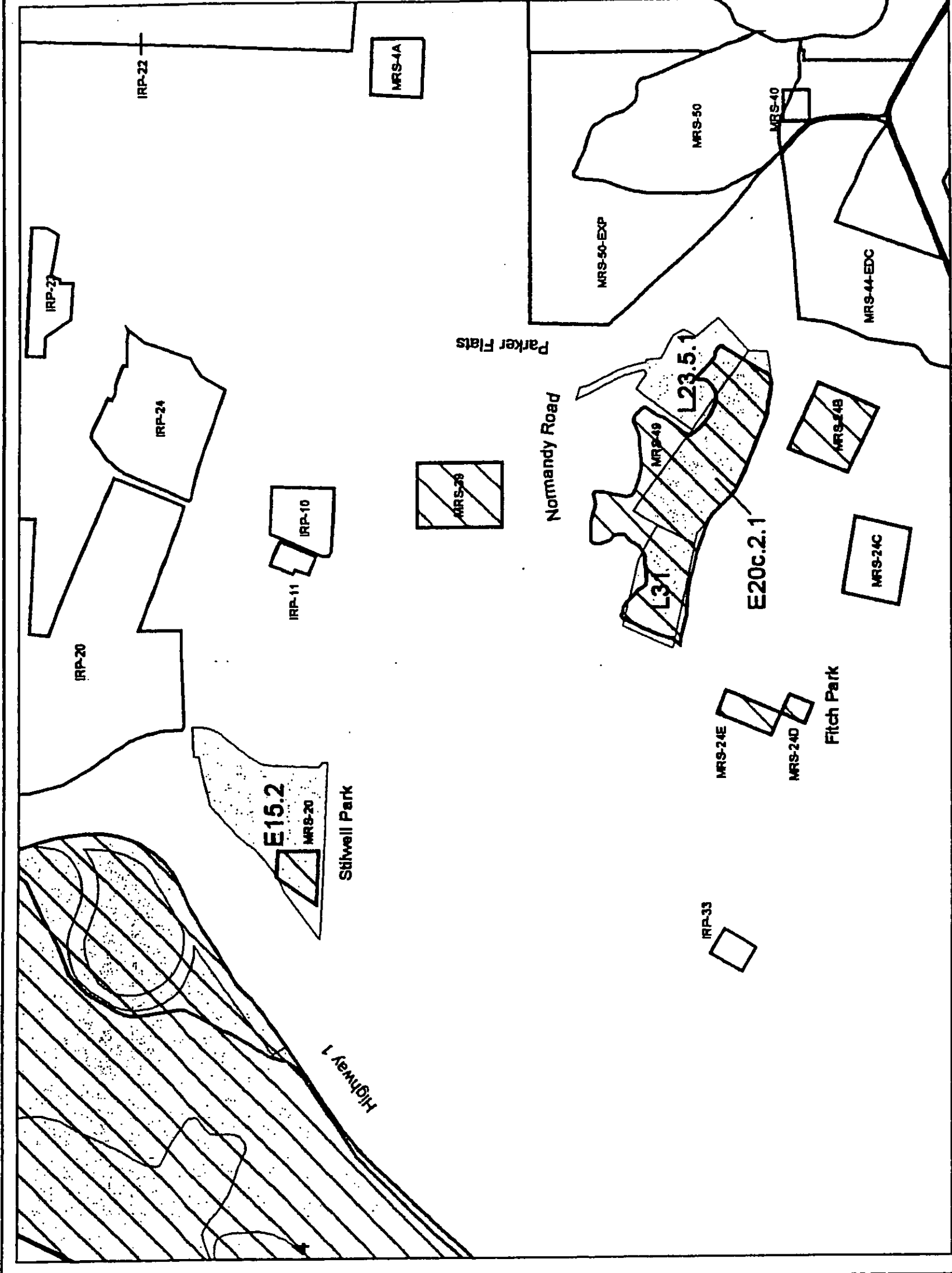
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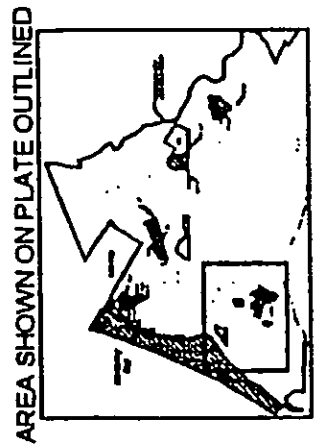
Finding of Suitability to Transfer
Track 0 Plug-In C, Track 1 And
Track 1 Plug-In Parcels
Former Fort Ord, California

Parcel Location
Map

PLATE



- EXPLANATION**
- TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1 PLUG-IN PARCEL
 - INSTALLATION RESTORATION PROGRAM SITE
 - MUNITIONS RESPONSE SITE
 - TRACK 1 MUNITIONS RESPONSE SITE



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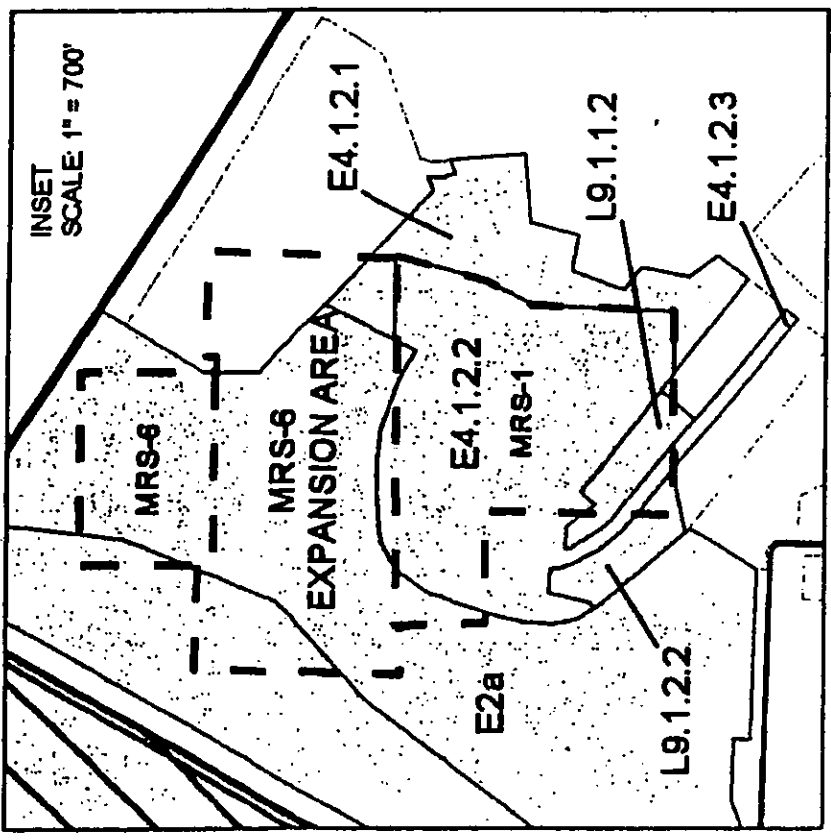
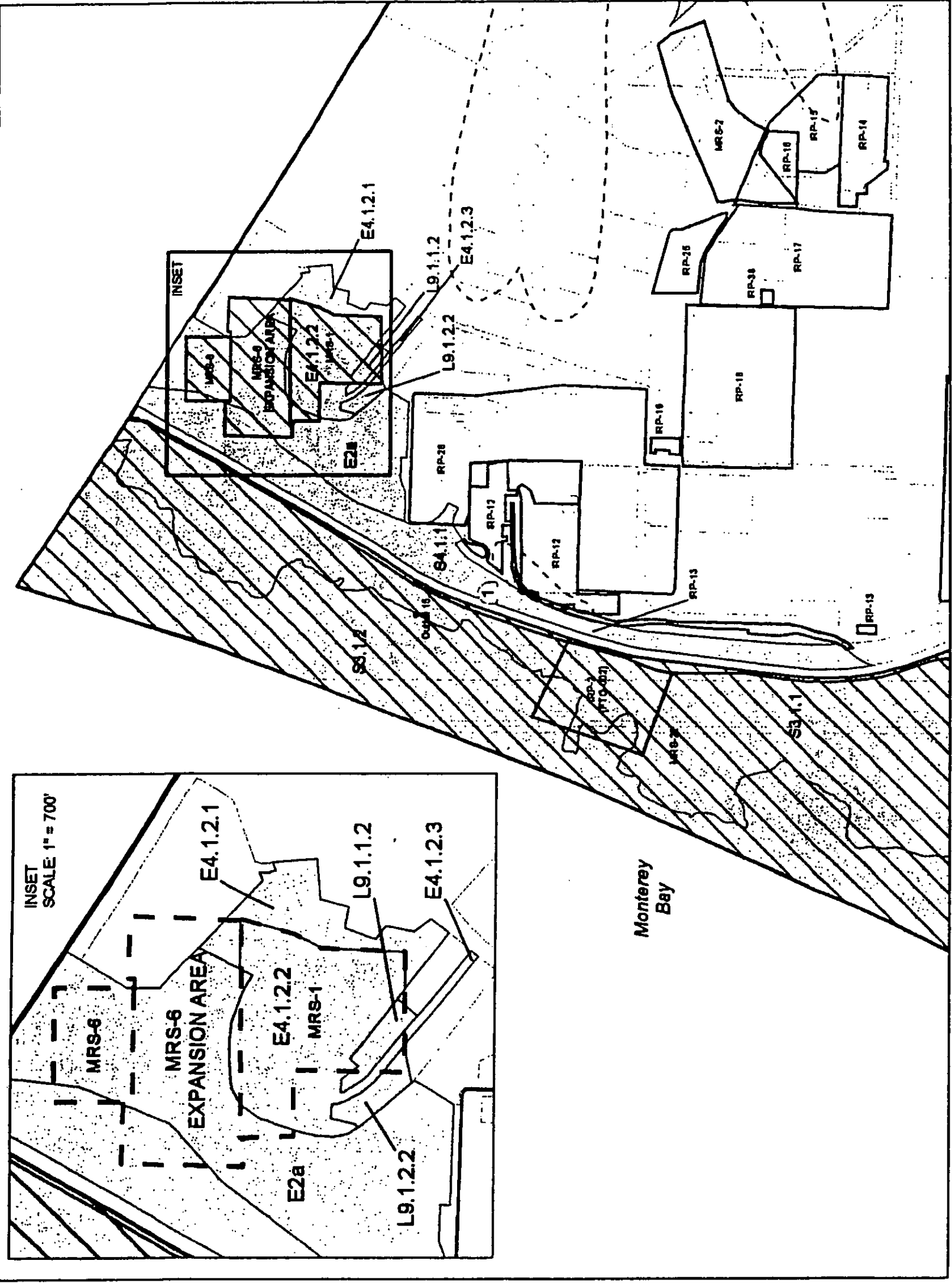
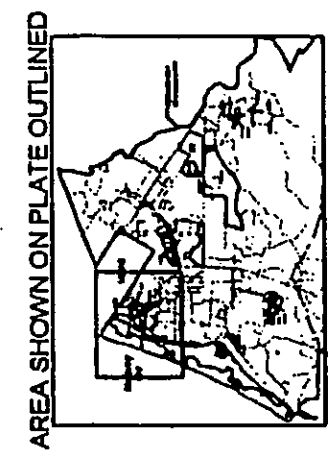
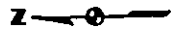
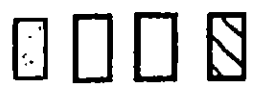
Finding of Suitability to Transfer
Track 0 Plug-In C, Track 1 And
Track 1 Plug-In Parcels
Former Ford Ordn, California

Parcel Location Map
Parcels L31, L23.5.1,
E20c.2.1, and E15.2

PLATE

3

- EXPLANATION**
- TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1 PLUG-IN PARCEL
 - INSTALLATION RESTORATION PROGRAM SITE
 - MUNITIONS RESPONSE SITE
 - TRACK 1 MUNITIONS RESPONSE SITE
 - APPROXIMATE AREAL EXTENT OF 5 PFBS CONTOUR (TCE IN GROUNDWATER, SEPTEMBER 2004)



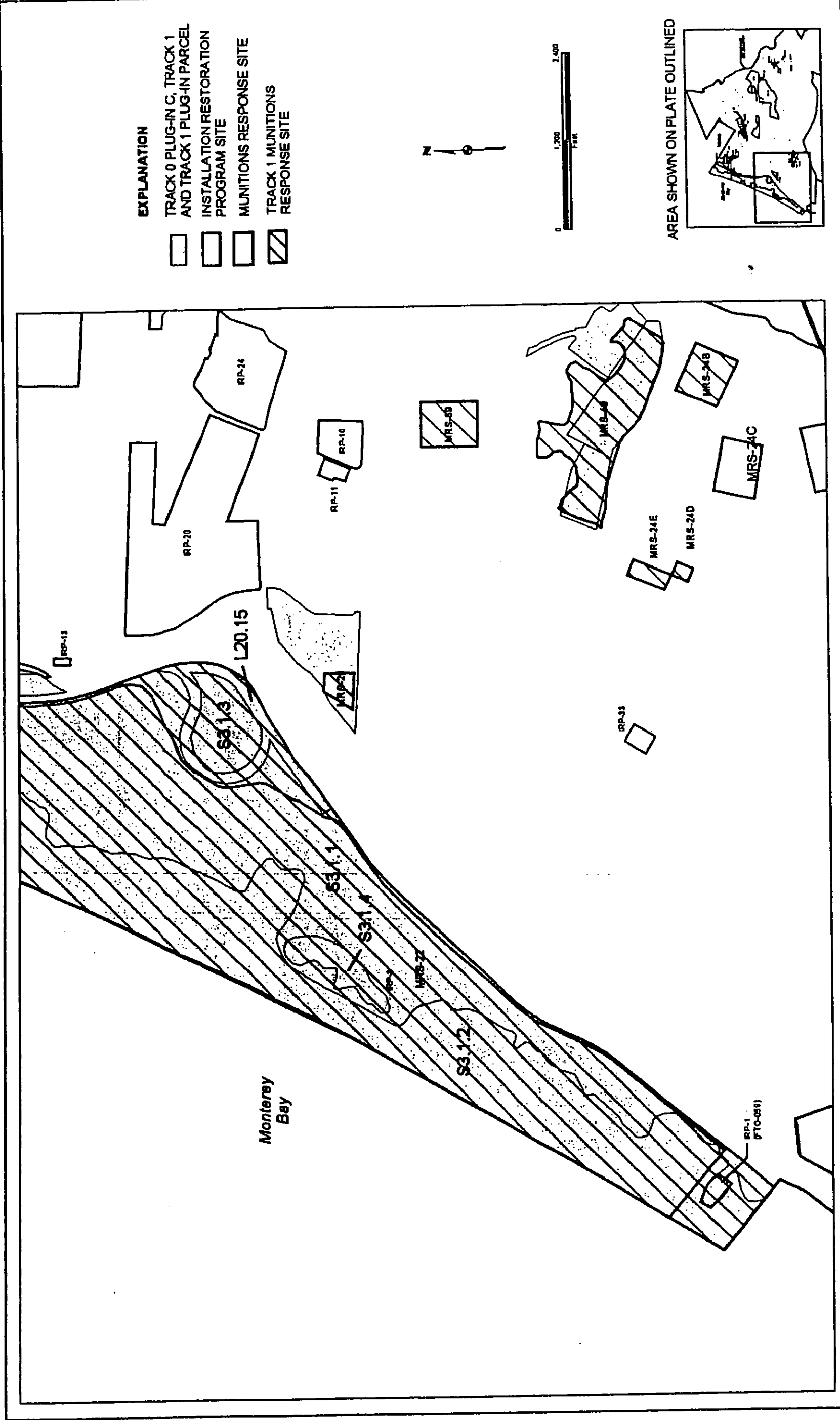
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Finding of Suitability to Transfer
Track 0 Plug-In C, Track 1 And
Track 1 Plug-In Parcels
Former Ford Ord, California

Parcel Location Map
Parcels E2a, E4.1.2.1, E4.1.2.2, E4.1.2.3,
L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.2, and S4.1.1

PLATE
4



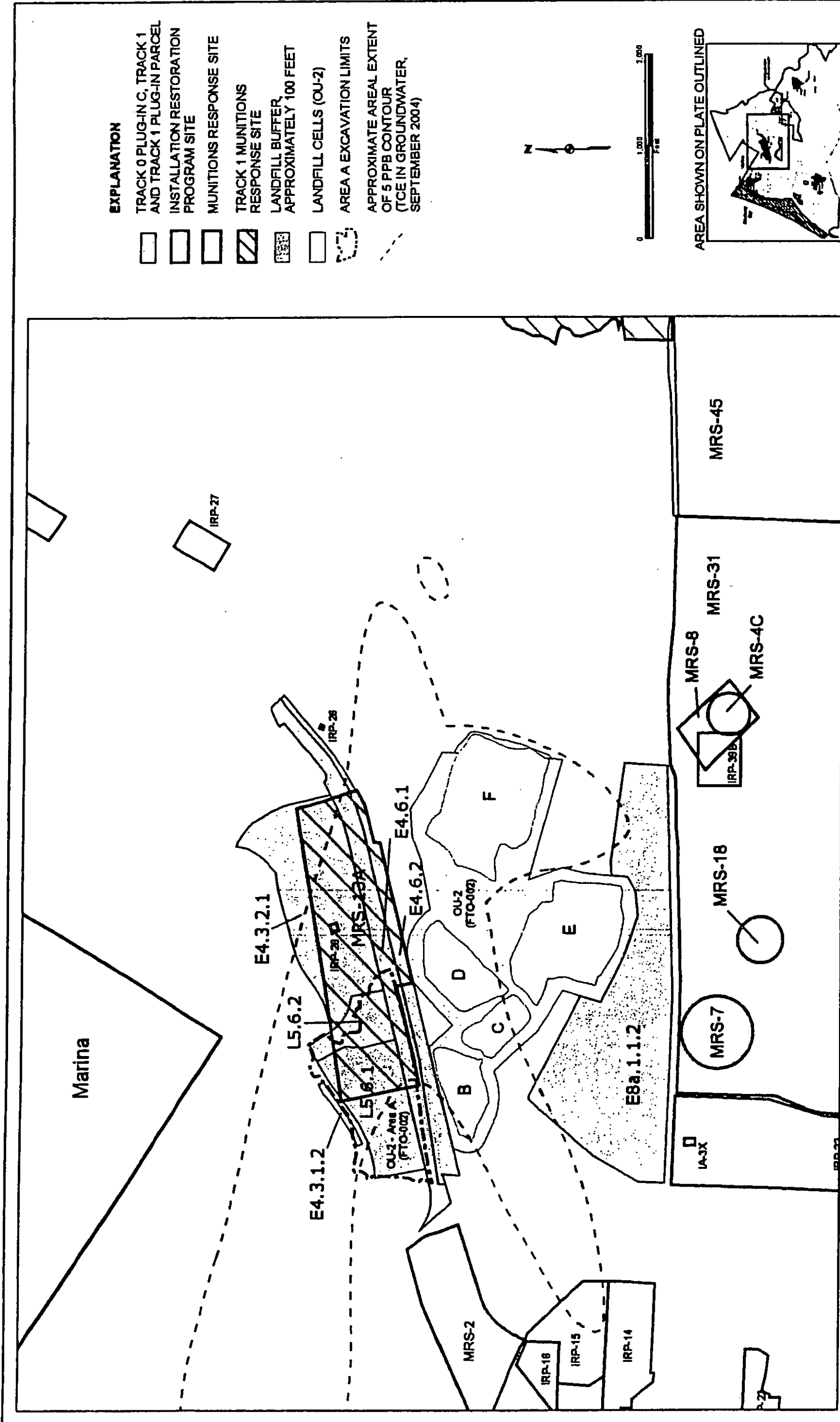
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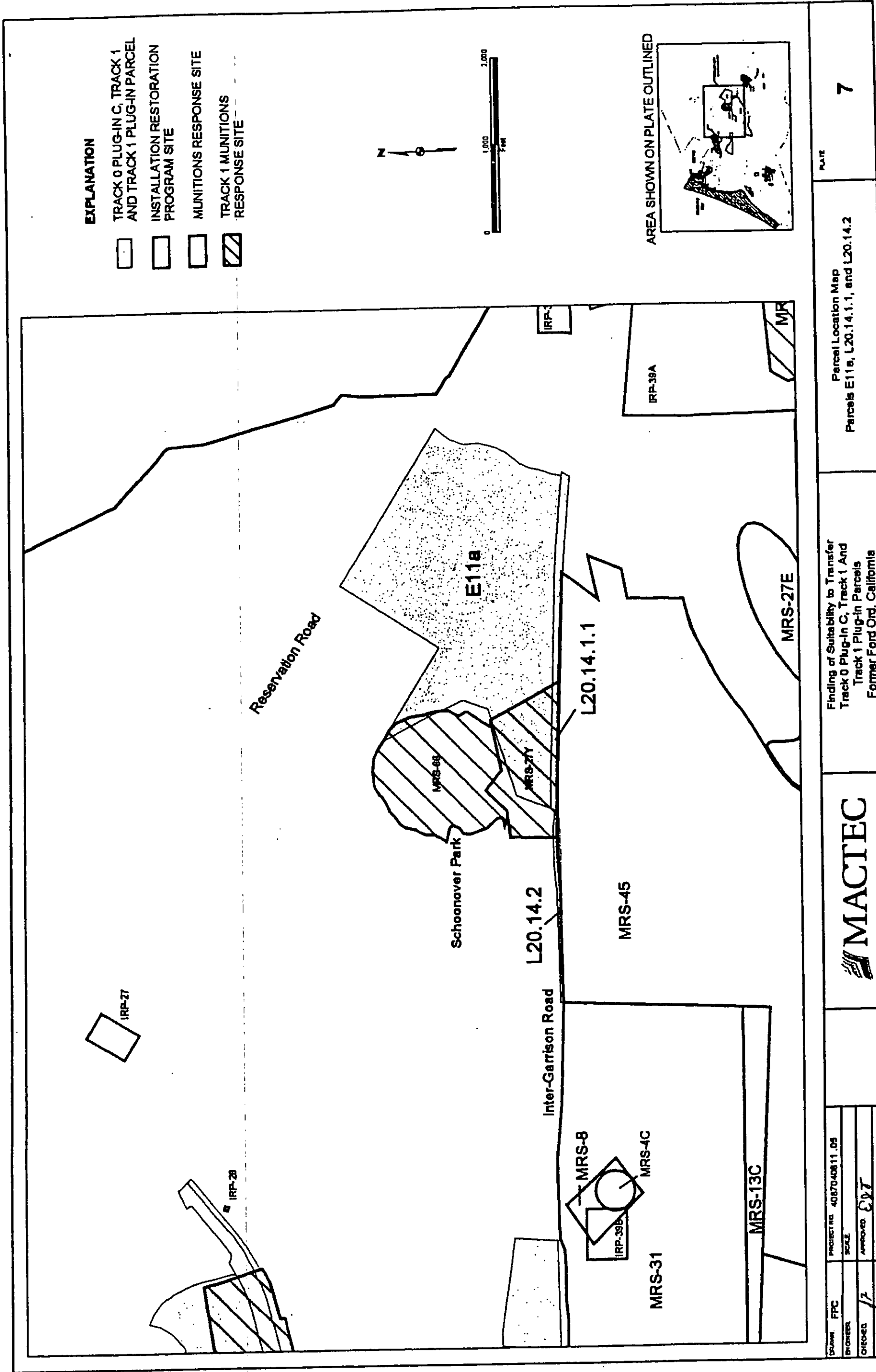
Finding of Suitability to Transfer Track 0 Plug-in C, Track 1 And Track 1 Plug-in Parcels Former Ford Ord, California

Parcel Location Map
 Parcels S3.1.1, S3.1.2, S3.1.3, S3.1.4, and L20.15

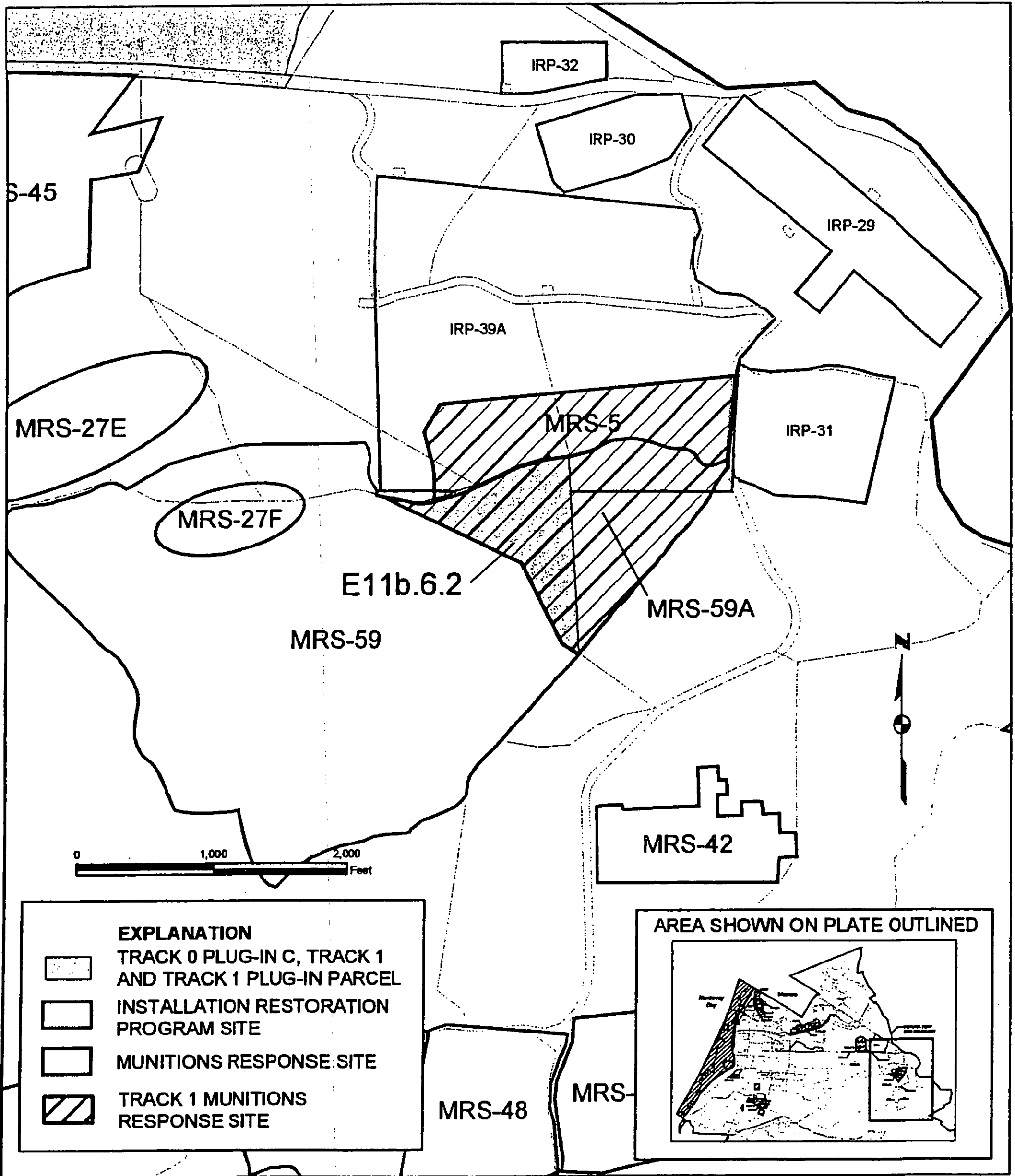
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SCALE												
APPROVED	EJT											
DATE	7/20/05											



Parcel Location Map - Parcel E11b.6.2

Finding of Suitability to Transfer
 Track 0 Plug-In C, Track 1 And
 Track 1 Plug-In Parcels
 Former Ford Ord, California

PLATE

8



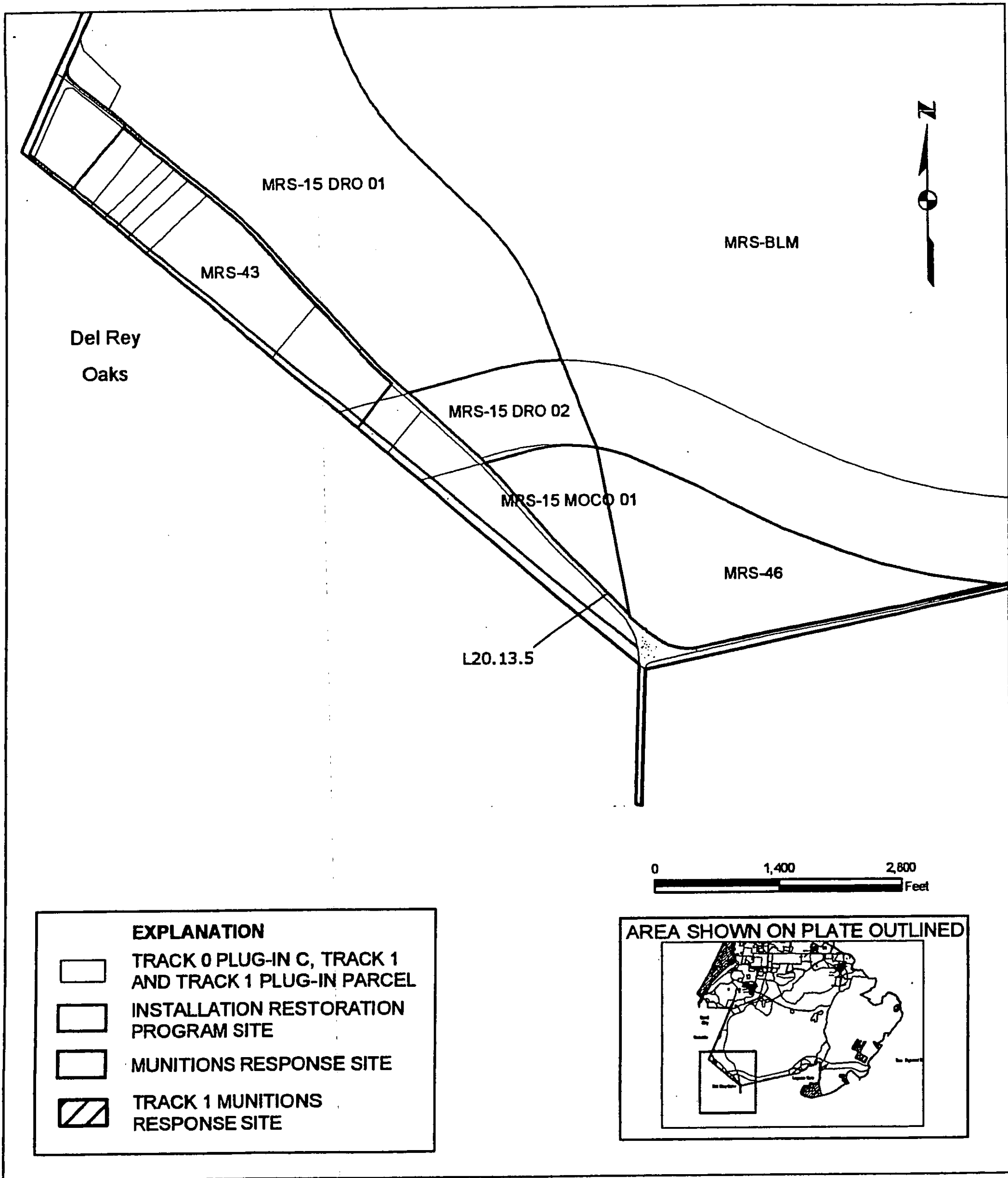
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REVISED DATE



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PLATE

Parcel Location Map - Parcel L20.13.5

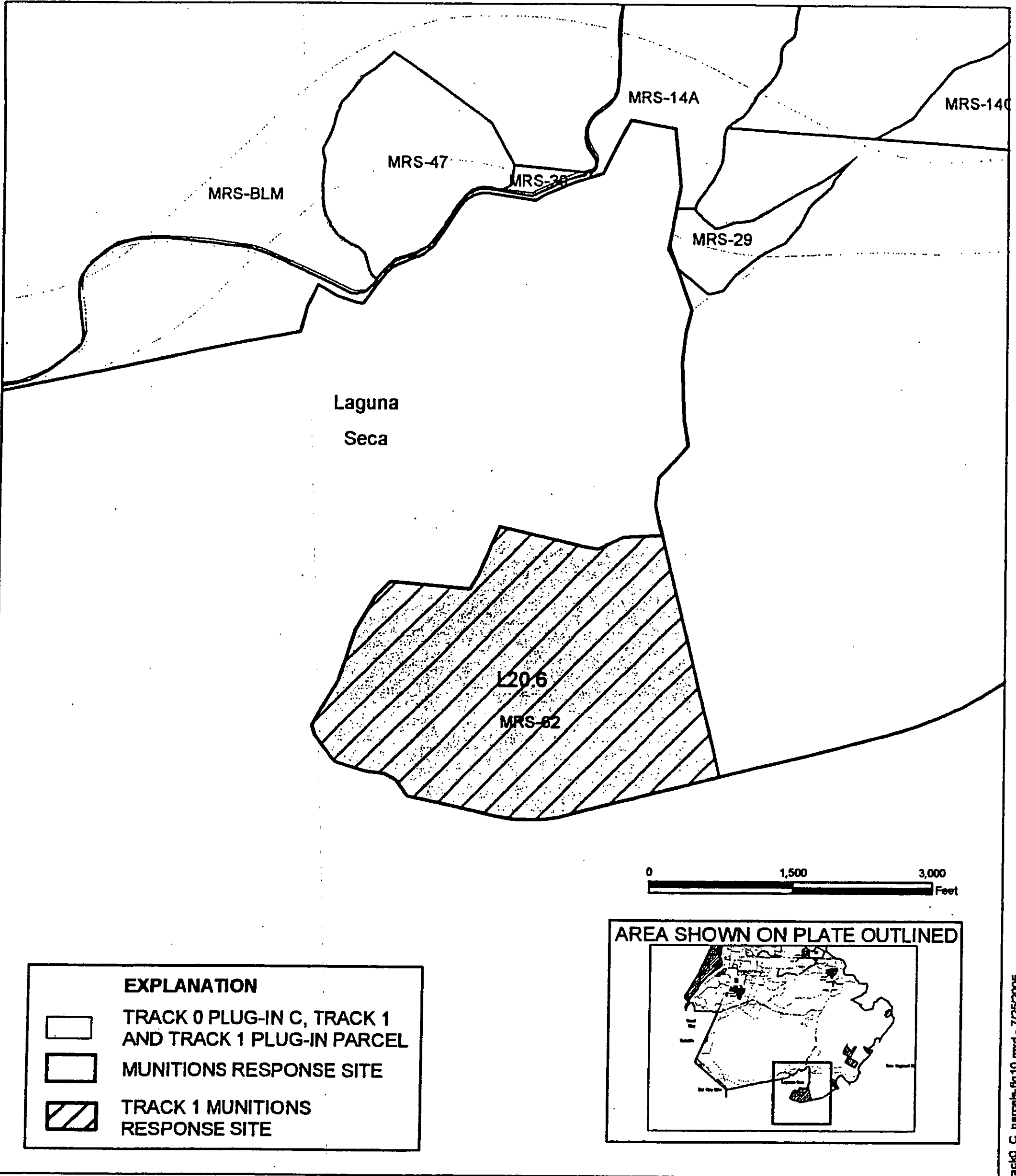
Finding of Suitability to Transfer
 Track 0 Plug-In C, Track 1 And
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 Former Ford Ord, California

9



DRAWN	JOB NUMBER	CHECKED	APPROVED	DATE	REVISED DATE
FPC	4087040811 .05	JZ	EJT	7/2005	

Exhibit 'B'



track0_C_parcels-fig10.mxd - 7/25/2005

Parcel Location Map - Parcel L20.6

Finding of Suitability to Transfer
Track 0 Plug-In C, Track 1 And
Track 1 Plug-In Parcels
Former Ford Ord, California

PLATE



10

DRAWN	JOB NUMBER	CHECKED	APPROVED	DATE	REVISED DATE
FPC	4087040811 .05	JZ	EJT	7/2005	

Exhibit 'B'

ATTACHMENT 2

ENVIRONMENTAL DOCUMENTATION

Environmental Documentation¹

- Interim Final Report, Hazardous Waste Consultation NO. 37-26-0176-89, Evaluation of Solid Waste Management Units (September 1988)
- Results of Radon Survey conducted during FY89/FY90 at Fort Ord (FO), Presidio of Monterey (POM), and Fort Hunter Liggett, as required by Army policy. Memorandum (1990)
- Fort Ord Federal Facility Agreement (November 19, 1990)
- Asbestos Survey Report For U.S. Army Corps of Engineers, Fort Ord Installation, Fort Ord, California (April 26, 1993)
- Final Environmental Impact Statement Fort Ord Disposal and Reuse (June 1993)
- Baseline Risk Assessment, Remedial Investigation/Feasibility Study, Site 2 Landfills, Fort Ord, California (June 7, 1993)
- Fort Ord, California Disposal and Reuse Environmental Impact Statement, Record of Decision (December 1993)
- Archive Search Reports (December 1993, November 1994, and December 1997)
- Industrial Radiation Survey, Facility Close Out and Termination Survey, Fort Ord, California (January 10, 1994 – April 15, 1994)
- Final Community Environmental Response Facilitation Act (CERFA) Report (April 1994)
- U.S. Environmental Protection Agency (US EPA) Region IX's concurrence to the CERFA Report (April 19, 1994)
- Record of Decision, Operable Unit 2, Fort Ord Landfills, Fort Ord, California (July 15, 1994)
- OEW Sampling And OEW Removal Action, Fort Ord Final Report. (December 1, 1994)
- No Action Plug-In Record of Decision (February 16, 1995)
- Approval Memorandum, Proposed No Action, Site 26 – Sewage Pump Stations (Buildings 5871 and 6143), Fort Ord, California (August 10, 1995)
- Approval Memorandum, Proposed No Action, Site 28 – Barracks and Main Garrison Area, Fort Ord, California (August 10, 1995)

¹ The normal sequence for drafts and revisions of documents at the former Fort Ord is Preliminary Draft (for internal review and comment), Draft (for regulatory agency and public review and comment), and Draft Final (final document which addresses all comments from the regulatory agencies and the public). As such, the Draft Final version is typically considered to be the final version. On rare occasion, not all comments are resolved by the Draft Final stage and a Final version of the document will be issued.

Environmental Documentation

- Final Basewide Remedial Investigation/Feasibility Study (RI/FS), Fort Ord, California. Volumes I-V, (October 18, 1995)
- US EPA Region IX's concurrence that the Operable Unit 2 groundwater remedy is operating properly and successfully (Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume) (January 4, 1996)
- Supplemental Environmental Impact Statement Fort Ord Disposal and Reuse (June 1996)
- Field Investigation and Data Review, Solid Waste Management Units (August 1996)
- Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California (January 13, 1997)
- Interim Record of Decision, Site 3, Beach Trainfire Ranges, Fort Ord, California (January 13, 1997)
- Draft Final Site Investigation Report, Buildings 2253, 3803, 4362, and 4534, Former Fort Ord, California (March 4, 1997)
- Installation-Wide Multispecies Habitat Management Plan (HMP) for Former Fort Ord, California (April 1997)
- Fort Ord, California Disposal and Reuse Final Supplemental Environmental Impact Statement, Record of Decision (June 1997)
- Lead Investigation Summary Peninsula Outreach, Marina Sports Center and Salvation Army Parcels and the Marshall and Stilwell Park Housing Areas, Former Fort Ord, California (July 28, 1997)
- Interim Action Confirmation Report, Site 1 Ord Village Sewage Treatment Plant, Fort Ord, California (December 10, 1997)
- Underground And Aboveground Storage Tank Management Plan Update, Former Fort Ord and Presidio of Monterey, Monterey County, California (March 13, 1998)
- Interim Action Confirmation Report, Outfall 15, Former Fort Ord, California (September 3, 1998)
- Interim Action Confirmation Report, Site 39A – East Garrison Ranges, Former Fort Ord, California (October 16, 1998)
- Biological and Conference Opinion on the Closure and Reuse of Fort Ord, Monterey County, California (1-8-99-F/C-39R) (March 30, 1999)
- Ordnance and Explosives (OE) RI/FS Literature Review Report, Former Fort Ord, California (January 2000)

Environmental Documentation

- Track 0 Technical Memorandum, Ordnance and Explosives Remedial Investigation/ Feasibility Study, Former Fort Ord, California (January 21, 2000)
- Superfund Proposed Plan: No Action Is Proposed For Selected Areas At Fort Ord, California (February 1, 2000)
- Draft Final Post-Closure Operation and Maintenance Plan, Areas B through F Remedial Action, Operable Unit 2 Landfills, Fort Ord, California (May 2000)
- Final Remedial Action Confirmation Report and Post-Remediation Risk Assessment, Site 3 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California. Volumes I and II (August 2000)
- Lead-Based Paint Risk Assessment, Patton Park Housing, Former Fort Ord, California (March 7, 2001), and Addendum (June 13, 2002)
- Draft Final Remedial Action Confirmation Report and Post-Remediation Screening Risk Evaluation, Area A Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0 (April 2001)
- Technical Memorandum, Support Documentation, Potential OE Issues, Parcel E4.3.1, Finding of Suitability for Early Transfer, Housing Areas and Former Garrison Parcels, Former Fort Ord, California (May 2, 2001)
- Draft Final Landfill Gas Perimeter Probe Monitoring Report, June, September, December 2000 and May 2001, Operable Unit 2 Landfill, Former Fort Ord, California, Revision 0 (February 2002)
- Final Record of Decision, No Action Regarding Ordnance-Related Investigation, Former Fort Ord, California (June 19, 2002)
- Draft Final Field Investigation and Data Review, Solid Waste Management Units, Fort Ord, California (July 2002)
- US EPA Region IX's concurrence: Demonstration that Remedial Action is "Operating Properly and Successfully," Sites 2/12 Groundwater Remedy, Former Fort Ord, California (July 3, 2002)
- Biological Opinion on the Closure and Reuse of Fort Ord, Monterey County, California, as it affects Monterey Spineflower Critical Habitat, (1-8-01-F-70R) (October 22, 2002)
- Draft Final Landfill Gas Perimeter Probe Monitoring Report, 2001, Operable Unit 2 Landfill, Former Fort Ord, California, Revision 0 (October 2002)
- Draft Final Landfill Gas Perimeter Probe Monitoring Report, 2002, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0 (April 2004)
- Final Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California (June 2004)

Environmental Documentation

- Final Landfill Gas Perimeter Probe Monitoring Report, 2003, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0 (November 2004)
- Draft Final Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, Former Fort Ord, California, Revision 0 (January 2005)
- Draft Track 2 Munitions Response Remedial Investigation/Feasibility Study, Parker Flats Munitions Response Area, Former Fort Ord California (January 2005)
- Draft Final Report, 2003 Ambient Air Monitoring and Human Health Risk Assessment, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0 (March 2005)
- Draft Final Work Plan, Landfill Gas System Expansion, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0 (March 2005)
- Draft Annual Report of Quarterly Monitoring, October 2003 through September 2004, Groundwater Monitoring Program, Former Fort Ord, California (March 4, 2005)
- Record of Decision, No Further Action Related to Munitions and Explosives of Concern – Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22); Former Fort Ord, California (March 10, 2005)
- Biological Opinion on Cleanup and Reuse of Former Fort Ord, Monterey County, California, as it affects California Tiger Salamander and Critical Habitat for Contra Costa Goldfields, (1-8-04-F-25R) (March 14, 2005)
- Final Report, Clay Target Debris and Lead Shot Management, East Garrison Trap and Skeet Range, Former Fort Ord, California (March 17, 2005)
- Final Comprehensive Basewide Range Assessment Report, Former Fort Ord, California, Revision 0 (March 31, 2005)
- Explanation of Significant Differences, Final Record of Decision, No Action Regarding Ordnance-Related Investigations (Track 0 ROD), Former Fort Ord, California (April 5, 2005)
- Track 0 Plug-In Approval Memorandum, Selected Parcels – Group C, Former Fort Ord, California (July 1, 2005)
- Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area, Former Fort Ord, California (May 2005)

ATTACHMENT 3

TABLES

Table 1 - Description of Property

Parcel Number (Acreage)	Recipient	Intended Reuse	Facility Number(s)	ACM Present	LBP Present ¹
E11a (147)	FORA	Habitat Management	No buildings or structures	---	No buildings or structures
E11b.6.2 (18)	FORA	Development/Mixed Use	No buildings or structures	---	No buildings or structures
E15.2 (29)	FORA	Open Space	No buildings or structures	---	No buildings or structures
E20c.2.1 (25)	FORA	Future Housing	No buildings or structures	---	No buildings or structures
E2a (63)	FORA	Development/Mixed Use	No buildings or structures	---	No buildings or structures
E4.1.2.1 (10)	FORA	Housing	8726 - 8727	Yes	Yes
			8708	Yes	Yes
			8568 - 8569	Yes	Yes
			8560 - 8562	Yes	Yes
			8555	Yes	Yes
			8529	Yes	Yes
			8515	Yes	Yes
E4.1.2.2 (26)	FORA	Housing	8516 - 8528	Yes	Yes
			8709 - 8717	Yes	Yes
			8727 - 8731	Yes	Yes
			8563 - 8568	Yes	Yes
		Sewage Pump Station	8775	Not Surveyed	Yes
E4.1.2.3 (1)	FORA	Right-of-way, Booker Street	No buildings or structures	---	No buildings or structures
E4.3.1.2 (1)	FORA	Housing	No buildings or structures	---	No buildings or structures
E4.3.2.1 (46)	FORA	Housing	6016 - 6019	Yes	No
			6021 - 6024	Yes	No
			6026 - 6073	Yes	No
			6078 - 6079	Yes	No
		Sewage Pump Station	6143	No	No

Table 1 – Description of Property

Parcel Number (Acreage)	Recipient	Intended Reuse	Facility Number(s)	ACM Present	LBP Present ¹
E4.6.1 (25)	FORA	Right-of-way, Imjin Road	No buildings or structures	---	No buildings or structures
E4.6.2 (17)	FORA	Right-of-way, Imjin Road	5871	No	Yes
			5871A	Not Surveyed	Yes
E8a.1.1.2 (85)	FORA	Non-irrigated Open Space	4A39	Not Surveyed	Yes
L20.13.5 (7)	FORA	Right-of-way, South Boundary Road	No buildings or structures	---	No buildings or structures
L20.14.1.1 (8)	FORA	Right-of-way, Intergarrison Road	No buildings or structures	---	No buildings or structures
L20.14.2 (3)	FORA	Right-of-way, Intergarrison Road	No buildings or structures	---	No buildings or structures
L20.15 (20)	FORA	Development	No buildings or structures	---	No buildings or structures
L20.6 (247)	Monterey County	Laguna Seca Park	No buildings or structures	---	No buildings or structures
L23.5.1 (15)	Monterey Peninsula College	School	4360 - 4367	4360-4366 Yes (4367 - not surveyed)	Yes
L31 (12)	Veterans Transition Center	Housing	No buildings or structures	---	No buildings or structures
L5.6.1 (23)	FORA	Development/Mixed Use	No buildings or structures	---	No buildings or structures
L5.6.2 (8)	FORA	Marina Park Offices	6009 - 6010	Yes	No
			6014 - 6015	Yes	No
L9.1.1.2 (2)	Veterans Transition Center	Housing	8714 - 8719	Yes	Yes
L9.1.2.2 (2)	Veterans Transition Center	Housing	8732 - 8735	Yes	Yes
S3.1.1 (477)	California Department of Parks and Recreation	State Park	5989	Not Surveyed	Yes
			2066	Yes	Yes
			2076A – 2076I	2076A – B and 2076D – I yes, 2076C no	Yes

Table 1 – Description of Property

Parcel Number (Acreage)	Recipient	Intended Reuse	Facility Number(s)	ACM Present	LBP Present ¹
			2076J – 2076S	Not surveyed	Yes
			TR9070	Yes	No
			2019	No	Yes
			922	No	Yes
			924	No	Yes
			914 - 915	No	Yes
			919	No	Yes
			919A	Not surveyed	Yes
S3.1.2 (468)	California Department of Parks and Recreation	State Park	No buildings or structures	---	No buildings or structures
S3.1.3 (22)	California Department of Parks and Recreation	State Park	1A99	Yes	Yes
S3.1.4 (13)	California Department of Parks and Recreation	State Park	916	No	Yes
S4.1.1 (72)	Caltrans	Right-of-way, Highway 1	No buildings or structures	---	No buildings or structures

¹ The presence or absence of lead-based paint (LBP) is assumed based on the date of construction. If the date of construction is not known, it is assumed that the building contains LBP.

Table 2 – Track 0 Plug-In Parcels Associated with Track 1 Sites (Group C)

Parcel Number	Approximate Total Parcel Acreage	Track 1 Sites Overlapping the Parcel	Sites Adjacent to the Parcel	Approximate Parcel Acreage Outside Track 1 Sites ¹	Approximate Parcel Acreage Within Track 1 Sites ²
E11a	147.3	MRS-27Y, MRS-66	MRS-45	138.6	8.7
E15.2	28.7	MRS-20	---	25.2	3.5
E20c.2.1	25.4	MRS-49	---	1.8	23.6
E2a	63.1	MRS-1, MRS-6, MRS-6 Expansion Area	---	19.1	44
E4.1.2.1	10.0	MRS-6 Expansion Area	MRS-1	8.8	1.2
E4.1.2.2	26.2	MRS-1, MRS-6 Expansion Area	---	0	26.2
E4.1.2.3	1.0	---	MRS-1	1.0	0
E4.3.1.2	1.2	---	MRS-13A	1.2	0
E4.3.2.1	46.2	MRS-13A	---	17.6	28.6
E4.6.1	25.1	MRS-13A	---	11.6	13.5
E4.6.2	16.4	MRS-13A	---	10.4	6.0
E8a.1.1.2	85.3	---	MRS-4C, MRS-7, MRS-8, MRS-18, MRS-31	85.3	0
L20.13.5	6.7	---	MRS-46, MRS-DRO.1, MRS-DRO.2, MRS-MOCO.1	6.7	0
L20.14.1.1	8.4	MRS-27Y	MRS-45	5.8	2.6
L20.14.2	3.2	MRS-27Y	MRS-45	2.9	0.3
L23.5.1	15.3	MRS-49	MRS-50EXP	13.1	2.1
L31	11.7	MRS-49	---	1.7	10.0
L5.6.1	22.6	MRS-13A	---	13.7	8.9
L5.6.2	8.5	MRS-13A	---	1.3	7.2

¹ Determination of suitability to transfer the portion of the Track 0 Plug-in parcel outside of the Track 1 sites is supported by the *Track 0 Plug-in Approval Memorandum, Selected Parcels – Group C* (July 1, 2005).

² Determination of suitability to transfer the portion of the Track 0 Plug-in parcel within the Track 1 sites is supported by the *Record of Decision, No Further Action Related to Munitions and Explosives of Concern—Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22)* (Track 1 ROD; March 10, 2005), and the *Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area*, (May 6, 2005).

Table 2 – Track 0 Plug-In Parcels Associated with Track 1 Sites (Group C)

Parcel Number	Approximate Total Parcel Acreage	Track 1 Sites Overlapping the Parcel	Sites Adjacent to the Parcel	Approximate Parcel Acreage Outside Track 1 Sites ¹	Approximate Parcel Acreage Within Track 1 Sites ²
L9.1.1.2	2.2	MRS-1	---	0.5	1.7
L9.1.2.2	2.4	MRS-1	---	0.3	2.1
S4.1.1	72.1	MRS-6, MRS-6 Expansion Area	MRS-22	68.2	3.9

Table 3 – Track 1 Parcels and Associated Track 1 Sites¹

Parcel Number	Approximate Total Parcel Acreage	Track 1 Sites Overlapping the Parcel	Sites Adjacent to the Parcel	Approximate Parcel Acreage Outside Track 1 Sites	Approximate Parcel Acreage Within Track 1 Sites
E11b.6.2	17.8	MRS-59A	MRS-5, MRS-59	0	17.8
L20.15	20.0	MRS-22	---	0	20.0
L20.6	247.2	MRS-62	---	0	247.2
S3.1.1	476.8	MRS-22	---	0	476.8
S3.1.2	468.2	MRS-22	---	0	468.2
S3.1.3	21.9	MRS-22	---	0	21.9
S3.1.4	12.6	MRS-22	---	0	12.6

¹ Determination of suitability to transfer the Track 1 parcels is supported by the *Record of Decision, No Further Action Related to Munitions and Explosives of Concern—Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22)* (Track 1 ROD; March 10, 2005).

Table 4 – Applicable Decision Documents by Parcel

Parcel Number	Applicable Decision Documents Supporting Determination of Suitability to Transfer
E11a	<ul style="list-style-type: none"> • Final Community Environmental Response Facilitation Act (CERFA) Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Plug-In Approval Memorandum, Selected Parcels – Group C (Track 0 Approval Memo – Group C [2005]) • Record of Decision, No Further Action Related to Munitions and Explosives of Concern—Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22) (Track 1 ROD [2005])
E11b.6.2	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)
E15.2	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
E20c.2.1	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
E2a	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • Track 1 Plug-In Approval Memo, MRS-6 Expansion Area (2005)
E4.1.2.1	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • DTSC Concurrence Letter, Patton Park Housing Suitable for Unrestricted Use (June 2003) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • Track 1 Plug-In Approval Memo, MRS-6 Expansion Area (2005)
E4.1.2.2	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • DTSC Concurrence Letter, Patton Park Housing Suitable for Unrestricted Use (June 2003) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • Track 1 Plug-In Approval Memo, MRS-6 Expansion Area (2005)
E4.1.2.3	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • DTSC Concurrence Letter, Patton Park Housing Suitable for Unrestricted Use (June 2003) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)

Table 4 – Applicable Decision Documents by Parcel

E4.3.1.2	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • Explanation of Significant Differences, Final Record of Decision, No Action Regarding Ordnance-Related Investigations (Track 0 ROD) (ESD, Track 0 ROD [2005])
E4.3.2.1	<ul style="list-style-type: none"> • Final CERFA Report (1994) • No Action Plug-In Record of Decision (ROD) (1995) • Approval Memorandum, Proposed No Action, Site 26 – Sewage Pump Stations (Buildings 5871 and 6143) (1995) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
E4.6.1	<ul style="list-style-type: none"> • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Remedial Action Confirmation Report and Post-Remediation Screening Risk Evaluation, Area A Operable Unit 2 Landfills (April 2001) • Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, (2005) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • ESD, Track 0 ROD (2005)
E4.6.2	<ul style="list-style-type: none"> • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, (2005) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
E8a.1.1.2	<ul style="list-style-type: none"> • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • ESD, Track 0 ROD (2005)
L20.13.5	<ul style="list-style-type: none"> • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • ESD, Track 0 ROD (2005)
L20.14.1.1	<ul style="list-style-type: none"> • CERFA Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
L20.14.2	<ul style="list-style-type: none"> • CERFA Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
L20.15	<ul style="list-style-type: none"> • Interim Record of Decision, Site 3 Beach Trainfire Ranges (January 1997) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)
L20.6	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)

Table 4 – Applicable Decision Documents by Parcel

L23.5.1	<ul style="list-style-type: none"> • Final CERFA Report (1994) • MCDOH Closure Letter, USTs 4362.1 and 4362.2 (January 1997) • RWQCB Closure Letter, USTs 4362.1 and 4362.2 (February 1997) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
L31	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
L5.6.1	<ul style="list-style-type: none"> • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Remedial Action Confirmation Report and Post-Remediation Screening Risk Evaluation, Area A Operable Unit 2 Landfills (April 2001) • Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, (2005) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • ESD, Track 0 ROD (2005)
L5.6.2	<ul style="list-style-type: none"> • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • Remedial Action Confirmation Report and Post-Remediation Screening Risk Evaluation, Area A Operable Unit 2 Landfills (April 2001) • Remedial Action Construction Completion Report, Operable Unit 2 Landfills, Areas A through F, (2005) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • ESD, Track 0 ROD (2005)
L9.1.1.2	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • DTSC Concurrence Letter, Patton Park Housing Suitable for Unrestricted Use (June 2003) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
L9.1.2.2	<ul style="list-style-type: none"> • Final CERFA Report (1994) • Fort Ord – CERCLA §120(h)(3) Transfer of Property Overlying OU-2 (Landfills) Groundwater Plume (1996) • DTSC Concurrence Letter, Patton Park Housing Suitable for Unrestricted Use (June 2003) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005)
S3.1.1	<ul style="list-style-type: none"> • Record of Decision, Basewide Remedial Investigation Sites (Basewide RI Sites ROD [1997]) • Interim Action Confirmation Report, Site 1 Ord Village Sewage Treatment Plant (1997) • DHS Memorandum, With Respect to Radiological Issues, Building 916 Released for Unrestricted Use (October 1997) • MCDOH Closure Letters, USTs 2076.1 and 2076.2 (January 1994) and UST 2070.1 (January 1997) • Interim Action Confirmation Report, Outfall 15 (1998) • Final Remedial Action Confirmation Report and Post-Remediation Risk Assessment, Site 3 Remedial Action, Basewide Remediation Sites (2000) • Demonstration that Remedial Action is “Operating Properly and Successfully,” Sites 2/12 Groundwater Remedy (2002) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)

Table 4 – Applicable Decision Documents by Parcel

S3.1.2	<ul style="list-style-type: none"> • Basewide RI Sites ROD (1997) • Final Remedial Action Confirmation Report and Post-Remediation Risk Assessment, Site 3 Remedial Action, Basewide Remediation Sites (2000) • Demonstration that Remedial Action is “Operating Properly and Successfully,” Sites 2/12 Groundwater Remedy (2002) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)
S3.1.3	<ul style="list-style-type: none"> • Interim Record of Decision, Site 3 Beach Trainfire Ranges (January 1997) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)
S3.1.4	<ul style="list-style-type: none"> • Final Remedial Action Confirmation Report and Post-Remediation Risk Assessment, Site 3 Remedial Action, Basewide Remediation Sites (2000) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 1 ROD (2005)
S4.1.1	<ul style="list-style-type: none"> • Final CERFA Report (1994) • No Action Plug-In ROD (1995) • Approval Memorandum, Proposed No Action, Site 28 – Barracks and Main Garrison Area (1995) • Demonstration that Remedial Action is “Operating Properly and Successfully,” Sites 2/12 Groundwater Remedy (2002) • Final Comprehensive Basewide Range Assessment Report (2005) • Track 0 Approval Memo – Group C (2005) • Track 1 ROD (2005) • Track 1 Plug-In Approval Memo, MRS-6 Expansion Area (2005)

Table 5 – Environmental Condition of Property

Parcel Designation	Condition Category ¹	Remedial Actions
E11a	1	None; parcel was categorized as CERFA Uncontaminated, however; portions of parcel include MRS-27Y and MRS-66, which were identified after completion of CERFA investigation. MRS-27 and MRS-66 were categorized as a Track 1 sites and were evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, require no further action related to MEC. MRS-27Y and MRS-66 were also evaluated for potential presence of chemical contamination related to use of military munitions as part of the BRA. Under the BRA MRS-27Y was identified as HA-157 and MRS-66 was identified as HA-196. Evaluation of HA-157 included literature search and review of the information gathered during the assessment and military munitions sampling conducted at MRS-27Y and adjacent MRSs. Based on results of literature search and absence of munitions debris observed during sampling, no further action related to chemical contamination was recommended for HA-157 (MRS-27Y) under the Fort Ord BRA. Evaluation of HA-196 included literature search, site reconnaissance, and mapping. No military munitions, concentrations of spent small arms ammunition or targets were found during site reconnaissance conducted at HA-196. No further investigation for chemical contamination was recommended for HA-196 (MRS-66) under the Fort Ord BRA. Based on this information Parcel E11a meets the definition of CERFA Uncontaminated property.
E11b.6.2	1	None; parcel was categorized as CERFA Uncontaminated; however, parcel includes small portion of area evaluated as part of overall investigation of Site 39A, East Garrison Ranges, and portion of MRS-59A, which was identified after completion of the CERFA investigation. A release at Site 39A (Interim Action Site 39A) occurred in target areas of former small arms ammunition firing ranges approximately 600 feet north and northeast and outside of the parcel boundary. MRS-59A was categorized as a Track 1 site and was evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-59A was also evaluated for potential presence of chemical contamination related to use of military munitions as part of the BRA. Under the BRA MRS-59A was included within HA-189. Evaluation of HA-189 included literature search, site reconnaissance, and mapping. No military munitions, concentrations of spent small arms ammunition or targets were found during site reconnaissance conducted at HA-189. No further investigation for chemical contamination was recommended for HA-189 (including MRS-59A) under the Fort Ord BRA. Based on this information Parcel E11b.6.2 meets the definition of CERFA Uncontaminated property.
E15.2	1	None; portion of parcel was categorized as CERFA Qualified because it includes MRS-20. MRS-20 was categorized as a Track 1 site and was evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-20 was also evaluated for potential presence of chemical contamination related to use of military munitions as part of the BRA. Under the BRA MRS-20 was identified as HA-122. Based on results of a literature search and no military munitions observed during sampling conducted at MRS-20, no further action related to chemical contamination was recommended for HA-122 (MRS-20) under the Fort Ord BRA. A portion of the parcel was categorized as CERFA Qualified because of presence of ACM and probable LBP in buildings adjacent to parcel; however, no buildings are present on Parcel E15.2. Remainder of parcel was categorized as CERFA Uncontaminated. Based on this information Parcel E15.2 meets the definition of CERFA Uncontaminated property.

Table 5 – Environmental Condition of Property

Parcel Designation	Condition Category ¹	Remedial Actions
E20c.2.1 and L31	1	None; Parcel E20c.2.1 was categorized as CERFA Uncontaminated. Portion of Parcel L31 was categorized as CERFA Uncontaminated and remainder was categorized as CERFA Qualified because of presence of ACM and probable LBP in buildings adjacent to parcel; however, no buildings are present on Parcel L31. Both parcels include portion of MRS-49 identified after completion of CERFA investigation. MRS-49 was categorized as a Track 1 site and was evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-49 was also evaluated for potential presence of chemical contamination related to use of military munitions as part of the BRA. Under the BRA MRS-49 was identified as HA-179. Evaluation of HA-179 included literature search, site reconnaissance, and mapping. No military munitions, concentrations of spent small arms ammunition or targets were found during site reconnaissance conducted at HA-179. No further investigation for chemical contamination was recommended for HA-179 (MRS-49) under the Fort Ord BRA. Based on this information Parcels E20c.2.1 and L31 meet the definition of CERFA Uncontaminated property.
L20.6	1	None; parcel was categorized as CERFA Uncontaminated; however, parcel includes MRS-62, which was identified after completion of CERFA investigation. MRS-62 was categorized as a Track 1 site and was evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-62 was also evaluated for potential presence of chemical contamination related to use of military munitions as part of the BRA. Under the BRA MRS-62 was identified as HA-192. Evaluation of HA-192 included literature search, site reconnaissance, and mapping. Only expended blank small arms ammunition casings were observed. No other evidence of military training was observed during site reconnaissance and no further investigation for chemical contamination was recommended for HA-192 (MRS-62) under the Fort Ord BRA. Based on this information Parcel L20.6 meets the definition of CERFA Uncontaminated property.
L20.13.5	1	None; parcel was categorized as CERFA Qualified (Parcel 176) because of its proximity to the former Impact Area; however, parcel comprises a portion of South Boundary Road and is located outside of the fenced Impact Area. No evidence was observed during the CERFA assessment to indicate storage, release, or disposal of hazardous substances or petroleum products or their derivatives within this parcel; therefore, this parcel meets the definition of CERFA Uncontaminated property.
L20.14.1.1 and L20.14.2	1	None; parcels comprise Intergarrison Road and associated right-of-ways. Parcels were categorized as CERFA Uncontaminated; however, parcels include a portion of MRS-27Y identified after completion of CERFA investigation. MRS-27Y was categorized as a Track 1 site and was evaluated in the Track 1 OE RI/FS and, in accordance with the Track 1 ROD, requires no further action related to MEC. MRS-27Y was also evaluated for potential presence of chemical contamination related to use of military munitions as part of the BRA. Under the BRA MRS-27Y was identified as HA-157. Evaluation of HA-157 included literature search and review of information gathered during site assessment and military munitions sampling conducted at MRS-27Y and adjacent munitions response sites. Based on results of the literature search and no munitions debris observed during sampling, no further action related to chemical contamination was recommended for HA-157 (MRS-27Y) under the Fort Ord BRA. Based on this information Parcels L20.14.1.1 and L20.14.2 meet the definition of CERFA Uncontaminated property.

Table 5 – Environmental Condition of Property

Parcel Designation	Condition Category ¹	Remedial Actions
L20.15 and S3.1.3	1	Parcels categorized as CERFA Disqualified (Parcels 20 and 45) because of release at IRP Site 3 and presence of construction debris in Parcel S3.1.3. Parcels categorized as CERFA Qualified (Parcels 20 and 45) because of ACM, LBP and MRS-22; however, parcels are not part of former range areas within IRP Site 3 and MRS-22 and did not require remediation. MRS-22 is designated a Track 1 site in the Track 1 ROD. Based on review of existing information, MEC is not expected to be found at MRS-22 and no further military munitions investigation is required. Based on this information Parcels L20.15 and S3.1.3 meet the definition of CERFA Uncontaminated property.
S3.1.4	1	Parcel categorized as CERFA Disqualified (Parcel 45) because of release at IRP Site 3 and CERFA Qualified (Parcel 45) because of presence of ACM, LBP and MRS-22; however, parcel is not part of former range areas within IRP Site 3 and MRS-22 and did not require remediation. MRS-22 is designated a Track 1 site in the Track 1 ROD. Based on review of existing information, MEC is not expected to be found at MRS-22 and no further military munitions investigation is required. Based on this information Parcel S3.1.4 meets the definition of CERFA Uncontaminated property.
L23.5.1	2	Parcel categorized as CERFA Disqualified (Parcel 40) because of petroleum storage in USTs and CERFA Qualified (Parcels 40 and 117) because of ACM in buildings on parcel. 800 cubic yards of petroleum impacted soil removed. Remaining soil could not be removed without threatening structural integrity of buildings. Vadose zone leaching model (VLEACH) used to evaluate potential impacts to groundwater from hydrocarbons remaining in soil. VLEACH modeling indicated concentrations of organic compounds remaining in soil do not pose significant threat to groundwater. Monterey County Department of Health (MCDOH) and California Regional Water Quality Control Board (RWCQB) granted closure for USTs 4362.1 and 4362.2 in letters dated January 6 and February 10, 1997, respectively.
E2a	3	<p>Parcel categorized as CERFA Qualified (Parcels 4, 128, 191) because of the presence of ACM, probable LBP, MRS-1 and MRS-6, and CERFA Disqualified (Parcels 2, 3 and 4) because of potential for release of sewage, petroleum storage and they overlie the Fort Ord Landfills (OU 2) groundwater plume. Migration of volatile organic compounds (VOCs) from the OU 2 groundwater plume but at concentrations that do not require a remedial response. MRS-1 and MRS-6 were evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-1 and MRS-6 and, in accordance with the Track 1 ROD, MRS-1 and MRS-6 require no further action related to MEC.</p> <p>The MRS-6 Expansion Area was evaluated in the Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area. Based on review of existing information, MEC is not expected to be found at MRS-6 Expansion Area and in accordance with eligibility criteria for Plug-In sites identified in the Track 1 ROD, no further action related to MEC is required for this area.</p>
E4.1.2.1 and E4.1.2.2	3	Parcels categorized as CERFA Qualified (Parcels 4, 128, 191) because of the presence of ACM, probable LBP and MRS-1, and CERFA Disqualified (Parcels 2, 3 and 4) because of potential for release of sewage, petroleum storage and they overlie the Fort Ord Landfills (OU 2) groundwater plume. Migration of volatile organic compounds (VOCs) from the OU 2 groundwater plume but at concentrations that do not require a remedial response. MRS-1 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-1 and, in accordance with the Track 1 ROD, MRS-1 requires no further action related to MEC.

Table 5 – Environmental Condition of Property

Parcel Designation	Condition Category ¹	Remedial Actions
E4.1.2.3, L9.1.1.2, and L9.1.2.2	3	Parcels categorized as CERFA Qualified (Parcels 4, 128, 191) because of presence of ACM, probable LBP and MRS-1, and CERFA Disqualified (Parcels 2, 3 and 4) because of potential for release of sewage, petroleum storage, and they overlie OU2 groundwater plume. Migration of VOCs from OU2 groundwater plume but at concentrations that do not require a remedial response. MRS-1 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-1 and, in accordance with the Track 1 ROD, MRS-1 requires no further action related to MEC.
E4.3.1.2, E8a.1.1.2	4	Parcels were categorized as CERFA Disqualified (Parcel 4) because they overlie the OU2 groundwater plume. Migration of VOCs from OU2 groundwater plume at concentrations exceeding MCLs. Groundwater remediation treatment system installed. US EPA concurrence that OU2 groundwater treatment system is operating properly and successfully 1/4/1996.
E4.3.2.1, E4.6.1, E4.6.2, L5.6.1, and L5.6.2	4	Parcels were categorized as CERFA Disqualified (Parcel 4) because of migration of VOCs from OU2 Landfills at concentrations exceeding MCLs, disposal of residential and commercial refuse, and MRS-13A. Groundwater remediation treatment system in place. US EPA concurrence that OU2 groundwater treatment system is operating properly and successfully on January 4, 1996. Portions of OU2 Landfills (Area A and some perimeter areas of main landfill) were removed and consolidated into main landfill south of Imjin Road. MRS-13A was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-13A and, in accordance with the Track 1 ROD, MRS-13A requires no further action related to MEC.
S4.1.1	4	Parcel was categorized as CERFA Disqualified (Parcel 4) because of migration of VOCs from Sites 2/12 groundwater plume at concentrations exceeding MCLs, CERFA Qualified (191) because of MRS-1 and MRS-6, and CERFA Uncontaminated. Groundwater remediation treatment system in place. US EPA concurrence that Sites 2/12 groundwater treatment system is operating properly and successfully on July 3, 2002. MRS-1 and MRS-6 were evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-1 and MRS-6 and, in accordance with the Track 1 ROD, MRS-1 and MRS-6 require no further action related to MEC. The MRS-6 Expansion Area was evaluated in the Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area. Based on review of existing information, MEC is not expected to be found at MRS-6 Expansion Area and in accordance with eligibility criteria for Plug-In sites identified in the Track 1 ROD, no further action related to MEC is required for this area.
S3.1.1 and S3.1.2	4	<p>Parcels categorized as CERFA Disqualified (Parcel 1, 4, 15, 16, 17, 44, 46,) because of potential release at storm water outfalls, migration of VOCs from Sites 2/12 groundwater plume, and releases at IRP Sites 1 and 3, and CERFA Qualified (Parcels 1, 15, 16, 17, 44, 45, 46, and 103) because of MRS-22, ACM, LBP, and use or repair of Nuclear Regulatory Commission (NRC) licensed materials in buildings on the parcel.</p> <p>Surface water outfall OF-15 was identified for characterization under Basewide RI/FS. OF-15 discharges to Parcel S3.1.1. Soil samples were collected at discharge point and downgradient of OF-15. Based on results of characterization sampling, soil impacted with total petroleum hydrocarbons, arsenic, lead and dieldrin was recommended for removal under the IA ROD. Approximately 430 cubic yards of soil were removed as part of IA activities. The Outfall 15 Confirmation Report was submitted to the regulatory agencies in September 1998. The US EPA and the DTSC concurred that contamination was adequately remediated and no further action was necessary at Outfall 15 in letters dated March 16, 2005 and April 11, 2005, respectively.</p>

Table 5 – Environmental Condition of Property

Parcel Designation	Condition Category ¹	Remedial Actions
		<p>Sites 2 and 12 groundwater plume is being remediated by extraction and treatment in accordance with the Basewide RI Sites ROD, which was signed by DTSC on January 16, 1997, by US EPA on January 17, 1997, and by RWQCB on January 22, 1997. Since installation and start-up of Sites 2 and 12 groundwater treatment system (April 1999), extent of the plume has been significantly reduced. Sites 2 and 12 Groundwater Remedy Operating Properly and Successfully Evaluation Report was submitted to the regulatory agencies in November 2001. On July 3, 2002, Army received concurrence from US EPA that the pump-and-treat system for remediation of the Site 2 and 12 groundwater plume is in place and operating "properly and successfully."</p> <p>IRP Site 2 (SWMU FTO-012) was investigated during the Basewide RI/FS. As part of cleanup activities associated with closure of SWMU FTO-012 all sludge remaining in sewage treatment plant sludge drying beds and evaporation ponds was removed. Additional SWMU cleanup activities included demolition of asphalt lined drying beds, removal of drying bed conveyance piping and excavation of soils below drying beds and ponds.</p> <p>IRP Site 1 (SWMU FTO-059) was investigated during the Basewide RI/FS. Mercury was detected in soil samples collected near former trickling filter at concentrations above PRG. Low concentrations of fecal coliform were also detected. Additional investigation was conducted to address agency concerns about elevated mercury levels within soil at former trickling filter and to evaluate suitability of disposing treated sewage residue from the sludge-drying beds at OU2 Landfills. Soil samples were collected from sludge drying beds, holding ponds and former trickling filter area. Based on data from the additional investigation, soil at former trickling filter was recommended for removal under the IA ROD. The Site 1 IA Confirmation Report was submitted to regulatory agencies in December 1997. US EPA and DTSC concurred that contamination was adequately remediated and no further action was necessary at Site 1 in letters dated April 6, 1998 and April 11, 2005, respectively.</p> <p>Remediation at IRP Site 3 consisted of the excavation of approximately 162,800 cubic yards of contaminated soil and spent ammunition.</p> <p>Building 916 (Parcel S3.1.1) was among 230 former Fort Ord buildings that were suspected to have contained/stored radioactive commodities, but for which no documented evidence was found. Twenty percent of the 230 buildings were randomly sampled by AEHA (reorganized in 1994 as USACHPPM). No radiological health hazards were identified for the twenty percent sampled, and USACHPPM recommended all 230 buildings be released for unrestricted use (memorandum dated May 2, 1997). In a memorandum dated October 1, 1997, the California Department of Health Services (DHS) released all buildings with documented or suspected use or storage of radioactive commodities (including Building 916) for unrestricted use.</p> <p>MRS-22 was evaluated in the Track 1 OE RI/FS. Based on review of existing information, MEC is not expected to be found at MRS-22 and, in accordance with the Track 1 ROD, MRS-22 requires no further action related to MEC.</p>

¹Environmental Condition of Property Categories.

Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).

Category 2: Areas where only release or disposal of petroleum products has occurred.

Table 5 – Environmental Condition of Property

Category 3: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

Category 5: Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required actions have not yet been taken.

Category 6: Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.

Category 7: Areas that have not been evaluated or require additional evaluation.

Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal

Location	Material Stored/ Quantity	Regulatory Synonym	CASRN ¹	RCRA Waste Number	Duration	Release/ Disposal
Parcels E4.3.1.2 and E8a.1.1.2						
Operable Unit (OU) 2 Landfills Groundwater Plume	Migration of groundwater associated with OU2 / Quantity released is unknown				1955-1991	Yes/No (see Table 5, Parcels E4.3.1.2 and E8a.1.1.2)
	Benzene	Benzol	71432	U019		
	Carbon Tetrachloride	Methane, tetrchloro	56235	U211		
	Chloroform	Methane, trichloro	67663	U044		
	1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	1,2-Dichloropropene	Propane, 1,2-dichloro-	78875	U083		
	Dichloromethane	Methane, dichloro	75092	U080		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		
Parcel E4.3.2.1						
OU2 Landfills Groundwater Plume	Migration of groundwater associated with OU2/Quantity released is unknown				1955-1991	Yes/No (See Table 5)
	Benzene	Benzol	71432	U019		
	Carbon Tetrachloride	Methane, tetrchloro	56235	U211		
	Chloroform	Methane, trichloro	67663	U044		
	1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	1,2-Dichloropropene	Propane, 1,2-dichloro-	78875	U083		
	Dichloromethane	Methane, dichloro	75092	U080		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		

Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal

Location	Material Stored/ Quantity	Regulatory Synonym	CASRN ¹	RCRA Waste Number	Duration	Release/ Disposal
Parcel E4.6.1						
OU2 Landfills, Solid Waste Management Unit (SWMU) FTO-002	Residential and commercial refuse/Quantity released is unknown				1955-1991	Yes/Yes (See Table 5)
OU2 Landfills Groundwater Plume	Benzene	Benzol	71432	U019		
	Carbon Tetrachloride	Methane, tetrchloro	56235	U211		
	Chloroform	Methane, trichloro	67663	U044		
	1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	1,2-Dichloropropene	Propane, 1,2-dichloro-	78875	U083		
	Dichloromethane	Methane, dichloro	75092	U080		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		
Parcel E4.6.2						
OU2 Landfills, SWMU FTO-002	Residential and commercial refuse/Quantity released is unknown				1955-1991	Yes/Yes (See Table 5)
OU2 Landfills Groundwater Plume	Benzene	Benzol	71432	U019		
	Carbon Tetrachloride	Methane, tetrchloro	56235	U211		
	Chloroform	Methane, trichloro	67663	U044		
	1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	1,2-Dichloropropene	Propane, 1,2-dichloro-	78875	U083		
	Dichloromethane	Methane, dichloro	75092	U080		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		

Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal

Location	Material Stored/ Quantity	Regulatory Synonym	CASRN ¹	RCRA Waste Number	Duration	Release/ Disposal
Parcel L5.6.1						
OU2 Landfills, SWMU FTO-002	Residential and commercial refuse/Quantity released is unknown				1955-1991	Yes/Yes (See Table 5)
OU2 Landfills Groundwater Plume	Benzene	Benzol	71432	U019		
	Carbon Tetrachloride	Methane, tetrchloro	56235	U211		
	Chloroform	Methane, trichloro	67663	U044		
	1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	1,2-Dichloropropene	Propane, 1,2-dichloro-	78875	U083		
	Dichloromethane	Methane, dichloro	75092	U080		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		
Parcel L5.6.2						
OU2 Landfills, SWMU FTO-002	Residential and commercial refuse/Quantity released is unknown				1955-1991	Yes/Yes (See Table 5)
OU2 Landfills Groundwater Plume	Benzene	Benzol	71432	U019		
	Carbon Tetrachloride	Methane, tetrchloro	56235	U211		
	Chloroform	Methane, trichloro	67663	U044		
	1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	1,2-Dichloropropene	Propane, 1,2-dichloro-	78875	U083		
	Dichloromethane	Methane, dichloro	75092	U080		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		

Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal

Location	Material Stored/ Quantity	Regulatory Synonym	CASRN ¹	RCRA Waste Number	Duration	Release/ Disposal
Parcel S4.1.1						
IRP Sites 2 and 12 Groundwater Plume	Chemicals of concern in groundwater/Quantity released is unknown				Unknown	Yes/Unknown (See Table 5)
	Chloroform	Methane, trichloro	67663	U044		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	1,1-Dichloroethene	Ethylene, 1,1-Dichloro-	75354	U078		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	Total 1,3- Dichloropropene	1-Propene, 1,3-dichloro-	542756	U084		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		
Parcel S3.1.1						
IRP Site 1	Mercury released at the site/Quantity released is unknown. Approximately 870 cubic yards of impacted soil was removed.				1950s through mid-1990s	Yes/No (See Table 5)
	Mercury	--	7439976	U151		
IRP Sites 2 and 12 Groundwater Plume	Chemicals of concern in groundwater/Quantity released is unknown				Unknown	Yes/Unknown (See Table 5)
	Chloroform	Methane, trichloro	67663	U044		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	1,1-Dichloroethene	Ethylene, 1,1-Dichloro-	75354	U078		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	Total 1,3- Dichloropropene	1-Propene, 1,3-dichloro-	542756	U084		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		
IRP Site 3	Lead released at the site/Quantity released is unknown. Approximately 162,800 cubic yards of lead impacted soil was removed.				Approximately 1940 through 1994	Yes/No (See Table 5)

Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal

Location	Material Stored/ Quantity	Regulatory Synonym	CASRN ¹	RCRA Waste Number	Duration	Release/ Disposal
	Lead	--	7439921	None assigned		
Surface Water Outfall 15	Release occurred at the outfall/Quantity released is unknown. Approximately 430 cubic yards of impacted soil was removed.				1940s through 1994	Yes/No (See Table 5)
	Lead	--	7439921	None assigned		
	Arsenic	--	7440382	None assigned		
	Hydrocarbons	--	Multiple	--		
	Dieldrin	Aldrin epoxide	60571	P037		
Parcel S3.1.2						
IRP Sites 2 and 12 Groundwater Plume	Chemicals of concern in groundwater/Quantity released is unknown				Unknown	Yes/Unknown (See Table 5)
	Chloroform	Methane, trichloro	67663	U044		
	1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077		
	1,1-Dichloroethene	Ethylene, 1,1-Dichloro-	75354	U078		
	cis-1,2-Dichloroethene	Ethylene, 1,2-dichloro-	156605	U079		
	Total 1,3- Dichloropropene	1-Propene, 1,3-dichloro-	542756	U084		
	Tetrachloroethene	Perchloroethylene	127184	U210		
	Trichloroethene	Trichloroethylene	79016	U228		
	Vinyl Chloride	Ethene, chloro-	75014	U043		
IRP Site 3	Lead released at the site/Quantity released is unknown. Approximately 162,800 cubic yards of lead impacted soil was removed.				Approximately 1940 through 1994	Yes/No (See Table 5)

¹Chemical Abstract Service Registry Number

Table 7 – Notification of Petroleum Product Storage, Release, or Disposal

Parcel Number	Tank Number	Product Type	Date of Storage, Release, or Disposal	Remedial Action
E4.3.2.1	6143	Diesel	250-gallon active AST installed in 1995.	None necessary
	6143.1	Diesel	60-gallon UST installed after 1979 and removed in 1995. No evidence of petroleum release.	UST removed in July 1995. Closure granted by the Monterey County Department of Health (MCDOH) in December 1995.
E4.1.2.2	8775	Gasoline	200-gallon active AST, date installed not available.	None necessary
	8775.1	Gasoline	200-gallon UST installed after 1963 and operated until 1995. No evidence of petroleum release.	UST removed in July 1995. No remedial action required. Closure granted by the MCDOH in January 1996.
L23.5.1	4362.1	Diesel	4,000-gallon UST operated from about 1976 until 1990. Release occurred during UST operation.	UST removed in August 1990. Remediation consisted of the removal of petroleum-impacted soil. Closure granted by the MCDOH in January 1997 and the RWQCB in February 1997.
	4362.2	Unknown	1,500-gallon UST installed in 1952. Unknown duration of use. Release occurred during UST operation.	UST removed in September 1990. Remediation consisted of the removal of petroleum-impacted soil. Closure granted by the MCDOH in January 1997 and by the RWQCB in February 1997.
	4363.1	Diesel	3,000-gallon UST operated from about 1956 until 1992. No evidence of petroleum release.	UST removed in April 1992. No remedial action required. Closure granted by the MCDOH in January 1994.
	4367.1	Propane	1,175-gallon inactive AST, date installed not available.	None necessary
	4367.2	Propane	375-gallon inactive AST, date installed not available.	None necessary
S3.1.1	2070.1	Diesel	UST of unknown size. Installed in about 1965. Release occurred during UST operation.	UST removed in May 1988. Investigation included geophysics, soil gas sampling and soil borings. Closure granted by the MCDOH in January 1997.
	2076.1	Diesel	500-gallon UST with unknown duration of use. No evidence of petroleum release.	UST removed in January 1992. No remedial action required. Closure granted by the MCDOH in January 1994.
	2076.2	Diesel	2,000-gallon UST operated from 1983 until 1991. No evidence of petroleum release.	UST removed in January 1992. No remedial action required. Closure granted by the MCDOH in January 1994.

Table 8 – Disposal (Army Action) Impacts and Mitigation Measures

Issue Area	Impact	Mitigation Measure	How Addressed in FOST ¹ and EPP ²
Land Use	Potential temporary land use conflicts between interim uses allowed by Army and necessary remediation activities.	Limit properties that may be outgranted and restrict access to remediation areas during remediation activities.	NA – applies only to leased properties.
Air Quality	Exposure of the public to asbestos during building demolition or after transfer of buildings to third parties.	Disclosure of the locations and quantities of buildings with asbestos-containing material (ACM) when transferred.	FOST – presence of ACM disclosed and Asbestos Survey Report is referenced in Section 4.5, specific parcels and buildings are listed in Table 1 (Attachment 3). EPP – presence of ACM disclosed and Asbestos Survey Report is referenced in Section 4.
Hazardous and Toxic Waste Site Remedial Action	Potential risks to public health and safety associated with hazardous materials.	Continue State-mandated and federally mandated cleanup process and remedial actions; cleanup of wastes is part of the project.	FOST – ongoing remedial actions are described in Sections 4.1.4, 4.2.1, 4.2.2 and 5.1 and Table 5 (Attachment 3). EPP – Groundwater Restriction is described in Section 2(A)(2); Notice of the Presence of Contaminated Groundwater in Section 6; Notice of the Presence of the Fort Ord Landfills in Section 7.
Munitions and Explosives of Concern (MEC)	Potential risks to public health and safety associated with MEC.	Continue MEC investigations and removal actions (munitions response); preparation of engineering evaluations, community education plan, and site maintenance and emergency response plan; and inform property recipients of the potential for MEC.	FOST – the Military Munitions Response Program is described in Sections 4.9 and 5.2. EPP – Notice for the Potential Presence of MEC in Section 3.
Vegetation, Wildlife, and Wetland Resources	Loss of federal protection for Monterey spineflower.	Develop and coordinate an installation-wide multi-species habitat management plan (HMP). Implement the HMP, including HMP protective covenants in deed transfers.	FOST – parcels are listed by HMP category in Section 4.10. EPP – HMP protective covenants are given in Section 8.

¹ Finding of Suitability to Transfer, Track 0 Plug-In C, Track 1 and Track 1 Plug-In Parcels.

² Environmental Protection Provisions attached to the FOST.

ATTACHMENT 4

**CERCLA NOTICE, COVENANT, AND ACCESS PROVISIONS
AND OTHER DEED PROVISIONS**

CERCLA NOTICE, COVENANT, AND ACCESS PROVISIONS AND OTHER DEED PROVISIONS

The following CERCLA Notice, Covenant, and Access Provisions, along with the Other Deed Provisions, will be placed in the deed in a substantially similar form to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities.

1. CERCLA NOTICE – PARCELS E2a, E4.1.2.1, E4.1.2.2, E4.1.2.3, E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L20.15, L5.6.1, L5.6.2, L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.2, S3.1.3, S3.1.4 AND S4.1.1.

For the Property, the Grantor provides the following notice, description, and covenant:

A. Pursuant to section 120(h)(3)(A)(i)(I) and (II) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(I) and (II)), available information regarding the type, quantity, and location of hazardous substances and the time at which such substances were stored, released, or disposed of, as defined in section 120(h), is provided in Exhibit___ [**FOST Table 6 – Hazardous Substance, Storage, Release and Disposal (Attachment 3) should be included as a deed exhibit**], attached hereto and made a part hereof. Additional information regarding the storage, release, and disposal of hazardous substances on the property has been provided to the Grantee, receipt of which the Grantee hereby acknowledges. Such additional information includes, but is not limited to, the Finding of Suitability to Transfer (FOST), Former Fort Ord, California, Track 0 Plug-in C and Track 1 Parcels (May 2005) and documents referenced therein.

B. Pursuant to section 120(h)(3)(A)(i)(III) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(i)(III)), a description of the remedial action taken, if any, on the property is provided in Exhibit___ [**FOST Table 5 – Environmental Condition of Property (Attachment 3) should be included as an exhibit in the final deed**], attached hereto and made a part hereof. Additional information regarding the remedial action taken, if any, has been provided to the Grantee, receipt of which the Grantee hereby acknowledges. Such additional information includes, but is not limited to, the Finding of Suitability to Transfer (FOST), Former Fort Ord, California, Track 0 Plug-in C and Track 1 Parcels (May 2005) and documents referenced therein.

2. CERCLA COVENANT – PARCELS E2a, E4.1.2.1, E4.1.2.2, E4.1.2.3, E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L20.15, L5.6.1, L5.6.2, L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.2, S3.1.3, S3.1.4 AND S4.1.1

Pursuant to section 120(h)(3)(A)(ii) and (B) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(ii) and (B)), the United States warrants that -

- A. All remedial action necessary to protect human health and the environment with respect to any hazardous substance identified pursuant to section 120(h)(3)(A)(i)(I) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 remaining on the property has been taken before the date of this deed, and
- B. Any additional remedial action found to be necessary after the date of this deed shall be conducted by the United States.

This warranty shall not apply in any case in which the person or entity to whom the property is transferred is a potentially responsible party with respect to such property. For purposes of this warranty, Grantee shall not be considered a potentially responsible party solely due to the presence of a hazardous substance remaining on the property on the date of this instrument, provided that Grantee has not caused or contributed to a release of such hazardous substance.

3. CERCLA COVENANT – PARCELS E11a, E11b.6.2, E15.2, E20c.2.1, L20.13.5, L20.14.1.1, L20.14.2, L20.6, AND L31

Pursuant to section 120(h)(4)(D)(i) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(4)(D)(i)), the United States warrants that any response action or corrective action found to be necessary after the date of this deed for hazardous substances existing on the property prior to the date of this deed shall be conducted by the United States. This warranty shall not apply in any case in which the person or entity to whom the property is transferred is a potentially responsible party with respect to such property. For purposes of this warranty, Grantee shall not be considered a potentially responsible party solely due to a hazardous substance remaining on the property on the date of this instrument, provided that Grantee has not caused or contributed to a release of such hazardous substance or petroleum product or its derivatives.

4. NOTICE OF RELEASE OR DISPOSAL OF PETROLEUM PRODUCTS OR THEIR DERIVATIVES AND COVENANT – PARCEL L23.5.1

- A. The Grantor has identified a portion of the Property (Parcel L23.5.1) as real property on which no hazardous substances were released or disposed of, but on which petroleum products or their derivatives are known to have been released or disposed of.
- B. Following a complete search of its files and records, the Grantor hereby provides notice that diesel fuel was released from a 4,000-gallon underground storage tank on the Property, which was operated from approximately 1976 to 1990.
- C. The Grantor covenants that all response actions necessary to protect human health and the environment with respect to any petroleum product remaining on the Property have been taken prior to the date of this conveyance.

D. The Grantor covenants that any response action or corrective action found to be necessary under applicable laws and regulations after the date of this conveyance with respect to the discovery of contamination that resulted from a release or disposal prior to conveyance of the Property shall be conducted by the United States. This warranty shall not apply in any case in which the person or entity to whom the Property is transferred is a potentially responsible party with respect to such property. For purposes of this warranty, Grantee shall not be considered a potentially responsible party solely due to the presence of a contaminant remaining on the Property on the date of this instrument, provided that Grantee has not caused or contributed to a release of such contaminant.

5. RIGHT OF ACCESS

- A. Pursuant to sections 120(h)(3)(A)(iii) and 120(h)(4)(D)(ii) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. §9620(h)(3)(A)(iii) and §9620(h)(D)(ii)), the United States retains and reserves a perpetual and assignable easement and right of access on, over, and through the Property, to enter upon the Property after the date of transfer of the Property in any case in which an environmental response action or corrective action is found to be necessary on the part of the United States, without regard to whether such environmental response action or corrective action is on the Property or on adjoining or nearby lands. Such easement and right of access includes, without limitation, the right to perform any environmental investigation, survey, monitoring, sampling, testing, drilling, boring, coring, test-pitting, installing monitoring or pumping wells or other treatment facilities, response action, corrective action, or any other action necessary for the United States to meet its responsibilities under applicable laws and as provided for in this instrument. Such easement and right of access shall be binding on the Grantee, its successors and assigns, and shall run with the land.
- B. In exercising such easement and right of access, the United States shall provide the Grantee or its successors or assigns, as the case may be, with reasonable notice of its intent to enter upon the Property and exercise its rights under this covenant, which notice may be severely curtailed or even eliminated in emergency situations. The United States shall use reasonable means, but without significant additional costs to the United States, to avoid and to minimize interference with the Grantee's and the Grantee's successors' and assigns' quiet enjoyment of the property. Such easement and right of access includes the right to obtain and use utility services, including water, gas, electricity, sewer, and communications services available on the Property at a reasonable charge to the United States. Excluding the reasonable charges for such utility services, no fee, charge, or compensation will be due the Grantee nor its successors and assigns, for the exercise of the easement and right of access hereby retained and reserved by the United States.
- C. In exercising such easement and right of access, neither the Grantee nor its successors and assigns, as the case may be, shall have any claim at law or equity against the United States or any officer, employee, agent, contractor of any tier, or servant of the United States based on actions taken by the United States or its officers, employees, agents,

contractors of any tier, or servants pursuant to and in accordance with this covenant. In addition, the Grantee, its successors and assigns, shall not interfere with any response action or corrective action conducted by the Grantor on the Property.

D. The U.S. Environmental Protection Agency (US EPA) and the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), and their officers, agents, employees, contractors, and subcontractors will have the right, upon reasonable notice to the Grantee, to enter upon the transferred premises in any case in which a response or corrective action is found to be necessary, after the date of transfer of the Property, or such access is necessary to carry out a response action or corrective action on adjoining property, including, without limitation, the following purposes:

- 1) To inspect field activities of the Grantor and its contractors and subcontractors.
- 2) To conduct any test or survey related to environmental conditions at the former Fort Ord or to verify any data submitted to the US EPA or the DTSC by the Grantor relating to such conditions.

6. "AS IS"

- A. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property and accepts the condition and state of repair of the subject Property. The Grantee understands and agrees that the Property and any part thereof is offered "AS IS" without any representation, warranty, or guaranty by the Grantor as to quantity, quality, title, character, condition, size, or kind, or that the same is in condition or fit to be used for the purpose(s) intended by the Grantee, and no claim for allowance or deduction upon such grounds will be considered.
- B. No warranties, either express or implied, are given with regard to the condition of the Property, including, without limitation, whether the Property does or does not contain asbestos or lead-based paint. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos, lead-based paint, or other conditions on the Property. The failure of the Grantee to inspect or to exercise due diligence to be fully informed as to the condition of all or any portion of the Property offered, will not constitute grounds for any claim or demand against the United States.
- C. Nothing in this "As Is" provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

7. HOLD HARMLESS

- A. To the extent authorized by law, the Grantee, its successors and assigns, covenant and agree to indemnify and hold harmless the Grantor, its officers, agents, and employees from (1) any and all claims, damages, judgments, losses, and costs, including fines and

penalties, arising out of the violation of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed by the Grantee, its successors and assigns, and (2) any and all claims, damages, and judgments arising out of, or in any manner predicated upon, exposure to asbestos, lead-based paint, or other condition on any portion of the Property after the date of conveyance.

- B. The Grantee, its successors and assigns, covenant and agree that the Grantor shall not be responsible for any costs associated with modification or termination of the NOTICES, USE RESTRICTIONS, AND RESTRICTIVE COVENANTS in this Deed, including without limitation, any costs associated with additional investigation or remediation of asbestos, lead-based paint, or other condition on any portion of the Property.
- C. Nothing in this Hold Harmless provision will be construed to modify or negate the Grantor's obligation under the CERCLA Covenant or any other statutory obligations.

8. POST-TRANSFER DISCOVERY OF CONTAMINATION

- A. If an actual or threatened release of a hazardous substance or petroleum product is discovered on the Property after the date of conveyance, Grantee, its successors or assigns, shall be responsible for such release or newly discovered substance unless Grantee is able to demonstrate that such release or such newly discovered substance was due to Grantor's activities, use, or ownership of the Property. If the Grantee, its successors or assigns believe the discovered hazardous substance is due to Grantor's activities, use or ownership of the Property, Grantee will immediately secure the site and notify the Grantor of the existence of the hazardous substances, and Grantee will not further disturb such hazardous substances without the written permission of the Grantor.
- B. Grantee, its successors and assigns, as consideration for the conveyance of the Property, agree to release Grantor from any liability or responsibility for any claims arising solely out of the release of any hazardous substance or petroleum product on the Property occurring after the date of the delivery and acceptance of this Deed, where such substance or product was placed on the Property by the Grantee, or its successors, assigns, employees, invitees, agents or contractors, after the conveyance. This paragraph shall not affect the Grantor's responsibilities to conduct response actions or corrective actions that are required by applicable laws, rules and regulations, or the Grantor's indemnification obligations under applicable laws.

9. ENVIRONMENTAL PROTECTION PROVISIONS

The Environmental Protection Provisions are at Exhibit _____, which is attached hereto and made a part hereof. The Grantee shall neither transfer the property, lease the property, nor grant any interest, privilege, or license whatsoever in connection with the property without the inclusion of the Environmental Protection Provisions contained herein, and shall require the inclusion of the Environmental Protection Provisions in all further deeds, easements, transfers, leases, or grant of any interest, privilege, or license.

ATTACHMENT 5

ENVIRONMENTAL PROTECTION PROVISIONS

ENVIRONMENTAL PROTECTION PROVISIONS

The following conditions, restrictions, and notifications will be attached, in a substantially similar form, as an exhibit to the deed and be incorporated therein by reference in order to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities at the former Fort Ord. A list of notices applicable to each parcel is provided at the end of this attachment.

1. FEDERAL FACILITIES AGREEMENT

The Grantor acknowledges that the former Fort Ord has been identified as a National Priorities List (NPL) Site under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) of 1980, as amended. The Grantee acknowledges that the Grantor has provided it with a copy of the Fort Ord Federal Facility Agreement (FFA) entered into by the United States Environmental Protection Agency (US EPA) Region IX, the State of California, and the Department of the Army, effective on November 19, 1990, and will provide the Grantee with a copy of any amendments thereto. For so long as the Property remains subject to the FFA, the Grantee, its successors and assigns, agree that they will not interfere with United States Department of the Army activities required by the FFA. In addition, should any conflict arise between the FFA and any amendment thereto and the deed provisions, the FFA provisions will take precedence. The Grantor assumes no liability to the Grantee, its successors and assigns, should implementation of the FFA interfere with their use of the Property.

2. LAND USE RESTRICTIONS

A. The United States Department of the Army (Army) has undertaken careful environmental study of the Property and concluded that the land use restrictions set forth below are required to ensure protection of human health and the environment. The Grantee, its successors or assigns, shall not undertake nor allow any activity on or use of the property that would violate the land use restrictions contained herein.

- 1) **Residential Use Restriction.** In accordance with the provisions of Section 5 of the Environmental Protection Provisions, the Grantee, its successors and assigns, shall use the Property solely for commercial or industrial activities and not for residential purposes unless the Grantee performs abatement as required under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992). For purposes of this provision, residential use includes, but is not limited to, single family or multi-family residences; childcare facilities; and nursing home or assisted living facilities; and any type of educational purpose for children/young adults in grades kindergarten through 12.
- 2) **Groundwater Restriction.** Grantee is hereby informed and acknowledges that the groundwater under portions of the Property and associated with the Sites 2 and 12 (Sites 2/12) groundwater plume and the Operable Unit 2 (OU2) groundwater plume is

contaminated with volatile organic compounds (VOCs), primarily trichloroethene (TCE).

- a) A Covenant to Restrict Use of Property (CRUP) for portions of the Property within the "Special Groundwater Protection Zone" will be made by and among The United States of America acting by and through the Army and the State of California acting by and through the DTSC and the California Regional Water Quality Control Board, Central Coast Region (RWQCB).
- b) The Grantee covenants for itself, its successors, and assigns not to access or use groundwater underlying the Property for any purpose. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
- c) The Grantee covenants for itself, its successors, and assigns that neither the Grantee, its successors or assigns, nor any other person or entity acting for or on behalf of the Grantee, its successors or assigns, shall interfere with any response action being taken on the Property by or on behalf of the Grantor, or interrupt, relocate, or otherwise interfere or tamper with any remediation system or monitoring wells now or in the future located on, over, through, or across any portion of the Property without the expressed written consent of the Grantor in each case first obtained.
- d) The Grantee covenants for itself, its successors, or assigns, that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

B. Modifying Restrictions. Nothing contained herein shall preclude the Grantee, its successors or assigns, from undertaking, in accordance with applicable laws and regulations and without any cost to the Grantor, such additional action necessary to allow for other less restrictive use of the Property. Prior to such use of the Property, Grantee shall consult with and obtain the approval of the Grantor, and, as appropriate, the State or federal regulators, or the local authorities in accordance with these Environmental Protection Provisions and the provisions of the CRUP(s). Upon the Grantee's obtaining the approval of the Grantor and, as appropriate, state or federal regulators, or local authorities, the Grantor agrees to record an amendment hereto. This recordation shall be the responsibility of the Grantee and at no additional cost to the Grantor.

C. Submissions. The Grantee, its successors and assigns, shall submit any requests to modifications to the above restrictions to Grantor, the US EPA, the DTSC and the RWQCB, in accordance with the provisions of the CRUP(s), by first class mail, postage prepaid, addressed as follows:

- 1) Grantor: Director, Fort Ord Office
Army Base Realignment and Closure
P.O. Box 5008
Presidio of Monterey, CA 93944-5008
- 2) US EPA: Chief, Federal Facility and Site Cleanup Branch
Superfund Division
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street, Mail Code: SFD-8-3
San Francisco, CA 94105-3901
- 3) DTSC: Chief of Northern California Operations
Office of Military Facilities
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, CA 95826-3200
- 4) RWQCB: Executive Officer
California Regional Water Quality Control Board
Central Coast Region
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

3. NOTICE OF THE POTENTIAL FOR THE PRESENCE OF MUNITIONS AND EXPLOSIVES OF CONCERN (MEC)

- A. The Grantee is hereby notified that due to the former use of the Property as a military installation, the Property may contain munitions and explosives of concern (MEC). The term MEC means specific categories of military munitions that may pose unique explosives safety risks and includes: (1) Unexploded Ordnance (UXO), as defined in 10 U.S.C. §101(e)(5); (2) Discarded military munitions (DMM), as defined in 10 U.S.C. §2710(e)(2); or (3) Munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. §2710(e)(3), present in high enough concentrations to pose an explosive hazard. For the purposes of the basewide Military Munitions Response Program (MMRP) being conducted for the former Fort Ord and these Environmental Protection Provisions, MEC does not include small arms ammunition .50 caliber and below.
- B. Portions of the Property were previously used for military training involving military munitions, or for disposal of munitions items. A review of existing records and available information indicates there are ten munitions response sites (MRSs) associated with the Property. Military training on the Property involved only the use of practice and pyrotechnic items that are not designed to cause injury, or military munitions items that do not pose an explosive hazard. Military munitions items were found within materials excavated from a landfill disposal area formerly on the Property; however, this is

attributed to disposal activities at the landfill and not training. All landfill disposal areas within the Property have been fully excavated, the landfilled material removed, and the excavated areas backfilled or regraded. The ten MRSs were evaluated and documented in the *Final Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study, former Fort Ord, California* (Track 1 OE RI/FS) (June 2004) the *Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area* (May 6, 2005) and, in accordance with the *Record of Decision, No Further Action Related to Munitions and Explosives of Concern – Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22)* (Track 1 ROD) (March 2005), no further action related to MEC is required at these ten MRSs.

- C. The Grantor represents that, to the best of its knowledge, no MEC is currently present on the Property. Notwithstanding the Grantor's determination, the parties acknowledge that there is a possibility that MEC may exist on the Property. If the Grantee, any subsequent owner, or any other person should find any MEC on the Property, they shall immediately stop any intrusive or ground-disturbing work in the area or in any adjacent areas and shall not attempt to disturb, remove or destroy it, but shall immediately notify the local law enforcement agency having jurisdiction on the Property so that appropriate U.S. Military explosive ordnance disposal personnel can be dispatched to address such MEC as required under applicable law and regulations and at no expense to the Grantee. The Grantee hereby acknowledges receipt of the "Ordnance and Explosives Safety Alert" pamphlet.
- D. Because the Grantor cannot guarantee that all MEC has been removed, the Grantor recommends reasonable and prudent precautions be taken when conducting intrusive operations on the Property and will, at its expense, provide construction worker ordnance recognition and safety training. For specific Track 1 sites that overlap the Property (MRS-1, MRS-6, (and MRS-6 Expansion Area), MRS-13A, MRS-22, MRS-27Y, MRS-49, MRS-59A, MRS-62, and MRS-66), the Army recommends construction personnel involved in intrusive operations at these sites attend the Grantor's ordnance recognition and safety training. To accomplish that objective, the Grantor requests notice from the Grantee of planned intrusive activities, and in turn will provide ordnance recognition and safety training to construction personnel prior to the start of intrusive work. The Grantor will provide ordnance recognition and safety refresher training as appropriate. For the Track 1 sites where ordnance recognition and safety training is recommended (MRS-1, MRS-6 (and MRS-6 Expansion Area), MRS-13A, MRS-22, MRS-27Y, MRS-49, MRS- 59A, MRS-62, and MRS-66), at the time of the next five-year review (2007), the Grantor will assess whether the education program should continue. If information indicates that no MEC items have been found in the course of development or redevelopment of the site, it is expected that the education program may, with the concurrence of the regulatory agencies, be discontinued, subject to reinstatement if a MEC item is encountered in the future.

E. Easement and Access Rights.

- 1) The Grantor reserves a perpetual and assignable right of access on, over, and through the Property, to access and enter upon the Property in any case in which a munitions response action is found to be necessary, or such access and entrance is necessary to carry out a munitions response action on adjoining property as a result of the ongoing Munitions Response Remedial Investigation/Feasibility Study. Such easement and right of access includes, without limitation, the right to perform any additional investigation, sampling, testing, test-pitting, surface and subsurface clearance operations, or any other munitions response action necessary for the United States to meet its responsibilities under applicable laws and as provided for in this Deed. This right of access shall be binding on the Grantee, its successors and assigns, and shall run with the land.
- 2) In exercising this easement and right of access, the Grantor shall give the Grantee or the then record owner, reasonable notice of the intent to enter on the Property, except in emergency situations. Grantor shall use reasonable means, without significant additional cost to the Grantor, to avoid and/or minimize interference with the Grantee's and the Grantee's successors' and assigns' quiet enjoyment of the Property; however, the use and/or occupancy of the Property may be limited or restricted, as necessary, under the following scenarios: (a) to provide the required minimum separation distance employed during intrusive munitions response actions that may occur on or adjacent to the Property; and (b) if Army implemented prescribed burns are necessary for the purpose of a munitions response action (removal) in adjacent areas. Such easement and right of access includes the right to obtain and use utility services, including water, gas, electricity, sewer, and communications services available on the property at a reasonable charge to the United States. Excluding the reasonable charges for such utility services, no fee, charge, or compensation will be due the grantee nor its successors and assigns, for the exercise of the easement and right of access hereby retained and reserved by the United States.
- 3) In exercising this easement and right of access, neither the Grantee nor its successors and assigns, as the case maybe, shall have any claim at law or equity against the United States or any officer, employee, agent, contractor of any tier, or servant of the United States based on actions taken by the United States or its officers, employees, agents, contractors of any tier, or servants pursuant to and in accordance with this Paragraph. In addition, the Grantee, its successors and assigns, shall not interfere with any munitions response action conducted by the Grantor on the Property.

F. The Grantee acknowledges receipt of the *Final Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study (Track 1 OE RI/FS) (June 2004) and the Record of Decision, No Further Action Related to Munitions and Explosives of Concern – Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22) (Track 1 ROD) (March 2005).*

4. NOTICE OF THE PRESENCE OF ASBESTOS AND COVENANT

- A. The Grantee is hereby informed and does acknowledge that friable and non-friable asbestos or asbestos-containing material (ACM) has been found on the Property, as described in the Asbestos Survey Report (April 26, 1993) and summarized in the CERFA Report (April 8, 1994). The Property may also contain improvements, such as buildings, facilities, equipment, and pipelines, above and below the ground, that contain friable and non-friable asbestos or ACM. The Occupational Safety and Health Administration (OSHA) and the U.S. Environmental Protection Agency (US EPA) have determined that unprotected or unregulated exposure to airborne asbestos fibers increases the risk of asbestos-related diseases, including certain cancers that can result in disability or death.
- B. Several buildings on the Property have been determined to contain friable asbestos. Detailed information is contained in the referenced survey report. The remaining buildings contain non-friable ACM rated in good condition. The Grantee agrees to undertake any and all asbestos abatement or remediation in the aforementioned buildings that may be required under applicable law or regulation at no expense to the Grantor. The Grantor has agreed to transfer said buildings to the Grantee, prior to remediation or abatement of asbestos hazards, in reliance upon the Grantee's express representation and covenant to perform the required asbestos abatement or remediation of these buildings.
- C. The Grantee covenants and agrees that its use and occupancy of the Property will be in compliance with all applicable laws relating to asbestos. The Grantee agrees to be responsible for any future remediation or abatement of asbestos found to be necessary on the Property to include ACM in or on buried pipelines that may be required under applicable law or regulation.
- D. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property as to its asbestos and ACM content and condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any asbestos or ACM hazards or concerns.

5. NOTICE OF THE PRESENCE OF LEAD-BASED PAINT (LBP) AND COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSE

- A. The Grantee is hereby informed and does acknowledge that all buildings on Parcels E4.1.2.1, E4.1.2.2, E4.6.2, E8a.1.1.2, L23.5.1, L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.3, and S3.1.4, which were constructed or rehabilitated prior to 1978, are presumed to contain lead-based paint. Lead from paint, paint chips, and dust can pose health hazards if not managed properly. Every purchaser of any interest in Residential Real Property on which a residential dwelling was built prior to 1978 is notified that such property may present exposure to lead from lead-based paint that may place young children at risk of developing lead poisoning.

- B. The Grantee covenants and agrees that it shall not permit the occupancy or use of any buildings or structures on Parcels E4.1.2.1, E4.1.2.2, E4.6.2, E8a.1.1.2, L23.5.1, L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.3, and S3.1.4 as Residential Property, as defined under 24 Code of Federal Regulations Part 35, without complying with this section and all applicable federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of Parcels E4.1.2.1, E4.1.2.2, E4.6.2, E8a.1.1.2, L23.5.1, L9.1.1.2, L9.1.2.2, S3.1.1, S3.1.3, and S3.1.4 where their use subsequent to this conveyance is intended for residential habitation, the Grantee specifically agrees to perform, at its sole expense, the Army's abatement requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992).
- C. The Grantee acknowledges that it has inspected or has had the opportunity to inspect the Property as to its lead-based paint content and condition and any hazardous or environmental conditions relating thereto. The Grantee shall be deemed to have relied solely on its own judgment in assessing the overall condition of all or any portion of the Property, including, without limitation, any lead-based paint hazards or concerns.

6. NOTICE OF THE PRESENCE OF CONTAMINATED GROUNDWATER

The groundwater beneath portions of the Property is contaminated with volatile organic compounds (VOCs), primarily trichloroethene (TCE). The most recent data available (Annual Report of Quarterly Monitoring, October 2003 through September 2004) indicates that:

- A. One parcel (S4.1.1) overlies the Sites 2/12 groundwater plume where the concentration of TCE in groundwater equals or exceeds 5.0 micrograms per liter ($\mu\text{g/L}$). For the Sites 2/12 groundwater plume area the maximum TCE concentration in the groundwater beneath the Property (Parcel S4.1.1) is between 5.0 $\mu\text{g/L}$ and 10 $\mu\text{g/L}$ and depth to groundwater is 68 to 75 feet below ground surface.
- B. Seven parcels (E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1 and L5.6.2) overlie the OU2 groundwater plume where the concentration of TCE in groundwater exceeds 5.0 $\mu\text{g/L}$. For the OU2 groundwater plume area the maximum TCE concentration in the groundwater beneath the Property (Parcel E4.3.1.2) is 26 $\mu\text{g/L}$ as measured in groundwater extraction well EW-OU2-12A and depth to groundwater is 125 to 175 feet below ground surface.

The maximum concentrations of the chemicals of concern (associated with the OU2 and Sites 2/12 groundwater plumes) detected in the groundwater monitoring or extraction wells on the Property (September 2004) are listed below. The quantity released of these compounds is unknown. The OU2 and Sites 2/12 groundwater aquifer cleanup levels (ACLs), presented in the OU2 Fort Ord Landfills Record of Decision (ROD) (July 1994) and Basewide Remedial Investigation Sites ROD (January 1997), are provided for comparison.

Chemicals of Concern in Groundwater and Aquifer Cleanup Levels
(OU2 and Sites 2/12 Plumes)

Chemical Name	Regulatory Synonym	CASRN*	RCRA Waste Number	Parcel	Well (EW-OU2)	Maximum Concentrations (µg/L)	ACL (µg/L)
Benzene	Benzol	71432	U019	E4.3.1.2	-10-A	0.3	1.0
Carbon Tetrachloride	Methane, tetrachloro-	56235	U211			ND	0.5
Chloroform	Methane, trichloro-	67663	U044	E4.3.1.2	-12-A	2.3	2.0
1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076	E4.3.1.2	-10-A	6.9	5.0
1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077	E4.3.1.2	-10-A	1.5	0.5
1,1-Dichloroethene	Ethene, 1,1-dichloro-	75354	U078			ND	6.0
Cis-1,2-Dichloroethene	Ethene, 1,2-dichloro(E)	156605	U079	E4.3.1.2	-10-A	8.9	6.0
1,2-Dichloropropane	Propane, 1,2-dichloro-	78875	U083	E4.3.1.2	-12-A	1.3	1.0
Total 1,3-Dichloropropene	Propene, 1,3-dichloro-	542756	--			ND	0.5
Methylene Chloride	Methane, dichloro-	75092	U080			ND	5.0
Tetrachloroethene	Ethene, tetrachloro-	127184	U210	E4.3.1.2	-10-A	5.4	3.0
Trichloroethene	Ethene, trichloro-	79016	U228	E4.3.1.2	-12-A	26	5.0
Vinyl chloride	Ethene, chloro-	75014	U043	E4.3.1.2	-10-A	0.7	0.1

*Chemical Abstract Services Registry Number

7. NOTICE OF THE PRESENCE OF THE FORT ORD LANDFILLS

Portions of the Property are located within 1,000 feet of the Fort Ord OU2 Landfills. In order to evaluate methane levels in soil adjacent to the OU2 Landfills, monitoring probes were installed within the landfill and around the landfill perimeter. The probes were placed at a spacing of 1,000 feet or less. The probes are sampled quarterly for methane and annually for volatile organic compounds. The probes will continue to be monitored for a period of thirty (30) years from the time the monitoring program was implemented (June 2000) or until written authorization to discontinue monitoring is provided by the appropriate enforcement agency with concurrence by the California Integrated Waste Management Board (CIWMB). Methane concentrations do not exceed the CIWMB standard of 5% by volume in probes located at the property boundary, with the exception of areas on the eastern side bordering property that is not included in this FOST. Results of perimeter probe monitoring may be found in the perimeter probe monitoring reports, which the Army publishes annually. The Army has implemented a gas collection and treatment system along the eastern side of the landfill adjacent to the existing housing area. To decrease the potential for landfill gas migration to surrounding property, a buffer was added extending 100 feet beyond the perimeter fencing. Future landowners should

refer to California Code of Regulations Title 27, Section 21190, which identifies protective measures for structures built on or within 1,000 feet of a landfill.

8. NOTICE OF RARE, THREATENED AND ENDANGERED SPECIES MANAGEMENT

- A. The property contains habitat occupied and/or potentially occupied by several sensitive wildlife and plant species, some of which are listed or proposed for listing as threatened or endangered under the Endangered Species Act (ESA). Applicable laws and regulations restrict activities that involve the potential loss of populations and habitats of listed species. To fulfill Grantor's commitment in the Fort Ord Disposal and Reuse Environmental Impact Statement Record of Decision, made in accordance with the National Environmental Policy Act of 1969, 42 U.S.C 4321 et seq., this deed requires the conservation in perpetuity of these sensitive wildlife and plant species and their habitats consistent with the U.S. Fish and Wildlife Service Biological Opinions for disposal of the former Fort Ord lands issued pursuant to Section 7 of the ESA on March 30, 1999, October 22, 2002, and March 14, 2005 respectively. By requiring Grantee, and its successors and assigns to comply with the Installation-Wide Multispecies Habitat Management Plan (HMP), Grantor intends to fulfill its responsibilities under Section 7 of the ESA and to minimize future conflicts between species protection and economic development of portions of the Property.
- B. Grantee acknowledges that it has received a copy of the HMP dated April 1997. The HMP, which is incorporated herein by reference, provides a basewide framework for disposal of lands within former Fort Ord wherein development and potential loss of species and/or habitat is anticipated to occur in certain areas of the former Fort Ord (the HMP Development Areas) while permanent species and habitat conservation is guaranteed within other areas of the former Fort Ord (i.e., the HMP Reserve and Corridor parcels). Disposal of former Fort Ord lands in accordance with and subject to the restrictions of the HMP is intended to satisfy the Army's responsibilities under Section 7 of the ESA.
- C. The following parcels of land within the Property hereby conveyed or otherwise transferred to Grantee are subject to the specific use restrictions and/or conservation, management, monitoring, and reporting requirements identified for the parcel in the HMP:
- 1) Habitat Reserve Parcels numbered: E11a, E11b.6.2 and S3.1.2; and
 - 2) Habitat reserves within the Development with Reserve Areas or Development with Restrictions Parcels numbered: E2a, E8a.1.1.2, S3.1.1, S3.1.3, and S4.1.1.
- D. Any boundary modifications to the Development with Reserve Areas or Development with Restrictions parcels or the Borderland Development Areas Along NRMA Interface must be approved in writing by the U. S. Fish and Wildlife Service (USFWS) and must maintain the viability of the HMP for permanent species and habitat conservation.

E. The HMP describes existing habitat and the likely presence of sensitive wildlife and plant species that are treated as target species in the HMP. Some of the target species are currently listed or proposed for listing as threatened or endangered under the ESA. The HMP establishes general conservation and management requirement applicable to the property to conserve the HMP species. These requirements are intended to meet mitigation obligations applicable to the property resulting from the Army disposal and development reuse actions. Under the HMP, all target species are treated as if listed under the ESA and are subject to avoidance, protection, conservations, and restoration requirements. Grantee shall be responsible for implementing and funding each of the following requirements set forth in the HMP as applicable to the property:

- 1) Grantee shall implement all avoidance, protection, conservation and restoration requirements identified in the HMP as applicable to the Property and shall cooperate with adjacent property owners in implementing mitigation requirements identified in the HMP for adjacent sensitive habitat areas.
- 2) Grantee shall protect and conserve the HMP target species and their habitats within the Property, and, other than those actions required to fulfill a habitat restoration requirement applicable to the Property, shall not remove any vegetation, cut any trees, disturb any soil, or undertake any other actions that would impair the conservation of the species or their habitats. Grantee shall accomplish the Resource Conservation Requirements and Management Requirements identified in Chapter 4 of the HMP as applicable to any portion of the Property.
- 3) Grantee shall manage, through an agency or entity approved by USFWS, each HMP parcel, or portion thereof, within the Property that is required in the HMP to be managed for the conservation of the HMP species and their habitats, in accordance with the provisions of the HMP.
- 4) Grantee shall either directly, or indirectly through its USFWS approved habitat manager, implement the management guidelines applicable to the parcel through the development of a site-specific management plan. The site-specific habitat management plan must be developed and submitted to USFWS (and, for non-Federal recipients, California Department of Fish and Game (CDFG) as well) for approval within six months from the date the recipient obtains title to the parcel. Upon approval by USFWS (and, as appropriate, CDFG) the recipient shall implement the plan. Such plans may thereafter be modified through the Coordinated Resource Management and Planning (CRMP) process or with the concurrence of USFWS (and, as appropriate, CDFG) as new information or changed conditions indicate the need for adaptive management changes. The six-month deadline for development and submission of a site-specific management plan may be extended by mutual agreement of USFWS, CDFG (if appropriate), and the recipient.

- 5) Grantee shall restrict access to the Property in accordance with the HMP, but shall allow access to the Property, upon reasonable notice of not less than 48 hours, by USFWS, and its designated agents, for the purpose of monitoring Grantee's compliance with, and for such other purposes as are identified in the HMP.
- 6) Grantee shall comply with all monitoring and reporting requirements set forth in the HMP that are applicable to the Property, and shall provide an annual monitoring report, as provided for in the HMP, to the Bureau of Land Management (BLM) on or before November 1 of each year, or such other date as may be hereafter agreed to by USFWS and BLM.
- 7) Grantee shall not transfer, assign, or otherwise convey any portion of, or interest in, the Property subject to the habitat conservation, management or other requirements of the HMP, without the prior written consent of Grantor, acting by and through the USFWS (or designated successor agency), which consent shall not be unreasonable withheld. Grantee covenants for itself, its successors and assigns, that it shall include and otherwise make legally binding the provisions of the HMP in any deed, lease, right of entry, or other legal instrument by which Grantee divests itself of any interest in all or a portion of the Property. The covenants, conditions, restrictions and requirements of this deed and the provisions of the HMP shall run with the land. The covenants, conditions, restrictions, and requirements of this deed and the HMP benefit the lands retained by the Grantor that formerly comprised Fort Ord, as well as the public generally. Management responsibility for the Property may only be transferred as a condition of the transfer of the Property, with the consent of the USFWS. USFWS may require the establishment of a perpetual trust fund to pay for the management of the Property as a condition of transfer of management responsibility from Grantee.
- 8) This conveyance is made subject to the following ENFORCEMENT PROVISIONS
 - a) Grantor hereby reserves a reversionary interest in all of the Property. If Grantor (or its assigns), acting through the USFWS or a designated successor agency, determines that those parcels identified in Paragraph C above or any other portion of the Property subject to a restriction or other requirement of the HMP is not being conserved and/or managed in accordance with the provisions of the HMP, then Grantor may, in its discretion, exercise a right to reenter the Property, or any portion thereof, in which case, the Property, or those portions thereof as to which the right of reentry is exercised, shall revert to Grantor. In the event that Grantor exercises its right of reentry as to all or portions of the Property, Grantee shall execute any and all documents that Grantor deems necessary to perfect or provide recordable notice of the reversion and for the complete transfer and reversion of all right, title and interest in the Property or portions thereof. Subject to applicable federal law, Grantee shall be liable for all costs and fees incurred by Grantor in perfecting the reversion and transfer of title. Any and all improvements on the Property or those portions thereof reverting back to Grantor

shall become the property of Grantor and Grantee shall not be entitled to any payment therefore.

- b) In addition to the right of reentry reserved in paragraph a. above, if Grantor (or its assigns), acting through the USFWS or a successor designated agency, determines that Grantee is violating or threatens to violate the provisions of paragraph 8 of this deed or the provisions of the HMP, Grantor shall provide written notice to Grantee of such violation and demand corrective action sufficient to cure the violation, and where the violation involves injury to the Property resulting from any use or activity inconsistent with the provisions of Paragraph 8 of this deed or the provisions of the HMP, to restore the portion of the Property so injured. If Grantee fails to cure a violation within sixty (60) days after receipt of notice thereof from Grantor, or under circumstances where the violation cannot reasonable be cured within a sixty (60) day period, or fails to continue to diligently cure such violation until finally cured, Grantor may bring an action at law or in equity in a court of competent jurisdiction to enforce the covenants, conditions, reservations and restrictions of this deed and the provisions of the HMP, to enjoin the violation, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the covenants, conditions, reservations and restrictions of this deed or the provisions of the HMP, or injury to any conservation value protected by this deed or the HMP, and to require the restoration of the Property to the condition that existed prior to such injury. If Grantor, in its good faith and reasonable discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to the species and habitat conservation values of the Property, Grantor may pursue its remedies under this paragraph without prior notice to Grantee or without waiting for the period provided for the cure to expire. Grantor's rights under this paragraph apply equally in the event of either actual or threatened violations of covenants, conditions, reservations and restrictions of this deed or the provisions of the HMP, and Grantee acknowledges that Grantor's remedies at law for any of said violations are inadequate and Grantor shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which Grantor may be entitled, including specific performance of the covenants, conditions, reservations and restrictions of this deed and the provisions of the HMP.
- c) Enforcement of the covenants, conditions, reservations and restrictions in this deed and the provisions of the HMP shall be at the discretion of Grantor, and any forbearance by Grantor to exercise its rights under this deed and the HMP in the event of any such breach or violation of any provision of this deed or the HMP by Grantee shall not be deemed or construed to be a waiver by Grantor of such provision or of any subsequent breach or violation of the same or any other provision of this deed or the HMP or of any of Grantor's rights under this deed or the HMP. No delay or omission by Grantor in the exercise of any right or remedy

upon any breach or violation by Grantee shall impair such right or remedy or be construed as a waiver.

- d) In addition to satisfying Army's responsibilities under Section 7 of the ESA, Grantee's compliance with the covenants, conditions, reservations and restrictions contained in this deed and with the provisions of the HMP are intended to satisfy mitigation obligations included in any future incidental take permit issued by USFWS pursuant to Section 10(a)(1)(B) of the Endangered Species Act which authorizes the incidental take of a target HMP species on the Property. Grantee acknowledges that neither this deed nor the HMP authorizes the incidental take of any species listed under the ESA. Authorization to incidentally take any target HMP wildlife species must be obtained by Grantee separately, or through participation in a broader habitat conservation plan and Section 10(a)(1)(B) permit based on the HMP and approved by USFWS.

ENVIRONMENTAL PROTECTION PROVISIONS – APPLICABLE NOTICES

Parcel Number	Notice of Hazardous Substance Storage, Release or Disposal	Notice of Petroleum Product Storage, Release or Disposal	Notice of the Potential for Munitions and Explosives of Concern	Notice of the Presence of Asbestos	Notice of the Presence of Lead-Based Paint	Notice of Contaminated Groundwater	Notice of Proximity to Landfill	Notice of the Presence of Threatened or Endangered Species
E11a	NA	NA	Yes	NA	NA	Yes	NA	Yes
E11b.6.2	NA	NA	Yes	NA	NA	Yes	NA	Yes
E15.2	NA	NA	Yes	NA	NA	Yes	NA	NA
E20c.2.1	NA	NA	Yes	NA	NA	Yes	NA	Yes
E2a	Yes	Yes	Yes	NA	NA	Yes	NA	Yes
E4.1.2.1	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA
E4.1.2.2	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA
E4.1.2.3	Yes	Yes	Yes	NA	NA	Yes	NA	NA
E4.3.1.2	Yes	Yes	Yes	NA	NA	Yes	Yes	NA
E4.3.2.1	Yes	Yes	Yes	Yes	NA	Yes	Yes	NA
E4.6.1	Yes	Yes	Yes	NA	NA	Yes	Yes	Yes
E4.6.2	Yes	Yes	Yes	NA	NA	Yes	Yes	Yes
E8a.1.1.2	Yes	Yes	Yes	NA	Yes	Yes	Yes	Yes
L20.13.5	NA	NA	Yes	NA	NA	NA	NA	Yes
L20.14.1.1	NA	NA	Yes	NA	NA	Yes	NA	Yes
L20.14.2	NA	NA	Yes	NA	NA	Yes	NA	Yes
L20.15	NA	NA	Yes	NA	Yes	Yes	NA	NA
L20.6	NA	NA	Yes	NA	NA	NA	NA	Yes
L23.5.1	NA	NA	Yes	Yes	Yes	NA	NA	Yes
L31	NA	NA	Yes	NA	NA	NA	NA	Yes
L5.6.1	Yes	Yes	Yes	NA	NA	Yes	Yes	Yes
L5.6.2	Yes	Yes	Yes	Yes	NA	Yes	Yes	Yes
L9.1.1.2	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA
L9.1.2.2	Yes	Yes	Yes	Yes	Yes	Yes	NA	NA
S3.1.1	Yes	Yes	Yes	Yes	Yes	Yes	NA	Yes
S3.1.2	Yes	Yes	Yes	NA	NA	Yes	NA	Yes
S3.1.3	NA	NA	Yes	Yes	Yes	Yes	NA	Yes
S3.1.4	NA	NA	Yes	NA	NA	Yes	NA	Yes
S4.1.1	Yes	Yes	Yes	NA	NA	Yes	NA	NA

ATTACHMENT 6

DEFINITIONS FOR THE MILITARY MUNITIONS RESPONSE PROGRAM

Definitions for the Military Munitions Response Program¹

Military Munitions Response Program (MMRP) – DOD-established program to manage environmental, health and safety issues presented by munitions and explosives of concern (MEC).

Military Munitions – Ammunition products and components produced for and used by the armed forces for national defense and security. The term does not include wholly inert items. (10 U.S.C. 101(e)(4)(A) through (C)).

Munitions Response (MR) – Response actions, including investigation, removal actions and remedial actions to address the explosives safety, human health, or environmental risks presented by unexploded ordnance (UXO) or discarded military munitions (DMM), or munitions constituents.

Munitions Response Site (MRS) – A discrete location that is known to require a munitions response.

Munitions and Explosives of Concern (MEC) – This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means: (A) Unexploded ordnance (UXO), as defined in 10 U.S.C. 101(e)(5)(A) through (C); (B) Discarded military munitions (DMM), as defined in 10 U.S.C. 2710 (e)(2); or (C) Munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. 2710 (e)(3), present in high enough concentrations to pose an explosive hazard. For the purposes of the basewide Munitions Response Program being conducted for the former Fort Ord and this FOST, MEC does not include small arms ammunition .50 caliber and below.²

Unexploded Ordnance (UXO) – Military munitions that (A) have been primed, fuzed, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (C) remain unexploded either by malfunction, design, or any other cause. (10 U.S.C. 101(e)(5)(A) through (C)). For the purposes of the basewide Munitions Response Program being conducted for the former Fort Ord and this FOST, UXO does not include small arms ammunition .50 caliber and below.

Discarded Military Munitions (DMM) – Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations. (10 U.S.C. 2710(e)(2)). For the purposes of the basewide Munitions Response Program being conducted for

¹ These are concise definitions. The reader is referred to United States Code as referenced in the definitions above for detailed information.

² In accordance with U.S. Army Engineering and Support Center, Huntsville, Ordnance and Explosives Center of Expertise guidance on small arms determinations, small arms ammunition (i.e., caliber .50 and smaller) present a very low risk to the public because: 1) caliber .50 and smaller rarely contain explosive projectiles, and 2) a deliberate effort must be applied (using a tool resembling a firing pin) to a very specific and small point (the primer) to make the round function.

the former Fort Ord and this FOST, UXO does not include small arms ammunition .50 caliber and below.

Munitions Constituents (MC) – Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 U.S.C. 2710).

Explosive Hazard – A condition where danger exists because explosives are present that may react (e.g., detonate, deflagrate) in a mishap with potential unacceptable effects (e.g., death, injury, damage) to people, property, operational capability, or the environment.

Explosives Safety – A condition where operational capability and readiness, people, property, and the environment are protected from the unacceptable effects or risks of potential mishaps involving military munitions.

Minimum Separation Distance (MSD) – MSD is the distance at which personnel in the open must be from an intentional or unintentional detonation.

Munitions Debris – Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization or disposal.

Range-related Debris – Debris, other than munitions debris, collected from operational ranges or from former ranges (e.g., targets).

Range – A designated land or water area that is set aside, managed, and used for range activities of the Department of Defense. (10 U.S.C. 101(e)(1)(A) and (B)).

Range Activities – Research, development, testing, and evaluation of military munitions, other ordnance, and weapons systems; and the training of members of the armed forces in the use and handling of military munitions, other ordnance, and weapons systems. (10 U.S.C. 101(e)(2)(A) and (B)).

Small Arms Ammunition – Ammunition, without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, or for shotguns.

ATTACHMENT 7

REGULATORY/PUBLIC COMMENTS



Department of Toxic Substances Control

Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

June 30, 2005

Ms. Gail Youngblood
BRAC Environmental Coordinator
Fort Ord Base Realignment and Closure Office
Post Office Box 5004
Monterey, California 93944-5004

REVIEW OF DRAFT FINDING OF SUITABILITY TO TRANSFER (FOST) TRACK 0
PLUG-IN, AND TRACK 1 PARCELS, GROUP C PARCELS, FORMER FORT ORD,
MONTEREY, CALIFORNIA, MAY 5, 2005

Dear Ms. Youngblood:

The Department of Toxic Substances Control (DTSC) has reviewed the Draft FOST for the subject parcels and has the following comments:

1. Please incorporate the following comment regarding lead-based paint into the draft FOST, or attach it to the draft FOST as an unresolved regulatory comment:

There are buildings on some of these Parcels that probably contain lead-based paint, and this paint may have fallen off the buildings into the soil. Further, the Army did not sample the buildings or the soil for lead-based paint. DTSC's position is that any soils surrounding structures containing lead-based paint should first be evaluated by property owners for releases of lead-based paint to soils prior to the property being used for residential or other sensitive uses.

The FOST contains a section entitled "Environmental Protection Provisions." These provisions will be part of the deed and include a section on lead-based paint which states that the property recipient shall not permit the occupancy or use any of the buildings or structures on the property as residential real property without complying with applicable federal, state and local laws and regulations pertaining to lead based paint hazards. Please be advised that "lead based paint hazards" include lead contamination in soil from lead based paint. DTSC intends to work with all parties to assure the Army's Environmental Protection Provisions and the State law and regulations are complied with regarding lead contaminated soil on former Fort Ord.

2. Please add the following language to the Draft FOST:

Because Fort Ord operated as a Resource Conservation and Recovery Act (RCRA) hazardous waste facility, the owner is required to conduct corrective action for any release or potential release of hazardous substances on the whole facility. The "facility," defined as the Fort Ord Hazardous Waste Facility, is the entire base within the original base boundary. In order to remove this potential corrective action liability for any current or future owners of former Fort Ord property, DTSC must make a Correction Action Complete Determination and Facility Boundary Modification in accordance with the California Hazardous Waste Control Law. This determination officially recognizes that all releases and potential releases of hazardous substances have been addressed pursuant to RCRA and terminates RCRA liability that could potentially be imposed upon future transferees. The boundary modification removes the property from the Fort Ord Hazardous Waste Facility. While DTSC has recommended that the Army do so, the Army has not requested a RCRA Corrective Action Complete Determination for these parcels. Should a transferee desire not to potentially have RCRA liabilities upon transfer of the property, they should contact DTSC to complete the necessary process. Once the request is received, DTSC would work closely with the requestor to complete the process, which includes modifying the facility boundary.

3. Table 4. Please ensure that all regulatory approvals of decision documents are referenced for each parcel in the final FOST. DTSC will complete its evaluation of the parcels and, if appropriate, will issue a No Further Action determination to the Army.
4. Site 39A. Please include a statement that DTSC's No Further Action Letter also applied to the removal of soils with elevated lead from a release of lead based paint. This removal was completed by the future property recipients for Army Parcel L23.3.1. This information explains that lead based paint release issues are addressed for this area to the satisfaction of DTSC and is further evidence of the suitability of the property for varied uses.
5. Plume Maps. Please include a map which depicts the aerial extent of the groundwater plumes in the FOST. The FOST should always show the location of all Installation Restorations Program Sites which impact the property.
6. Plate 6, Landfill areas. This map does not clearly depict the 100 foot buffer zone around the landfill boundary. In addition, the legend does not describe the buffer zone. Please revise the map to clearly delineate the buffer zone and describe it in the map legend.

Ms. Gail Youngblood
June 30, 2005
Page 3

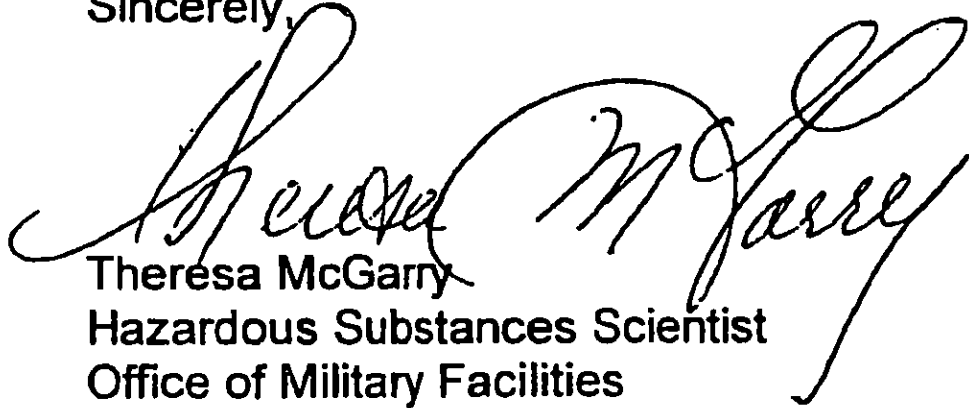
7. As of the date of this letter, DTSC has not received the Munitions and Explosives information it requested on Parcel E8a.1.1.2.

Finally, DTSC reserves the right to address any appropriate environmental or human health related issues should additional information concerning the environmental condition of subject property become available in the future.

DTSC expects to see the final version of the FOST, prior to release, to ensure all regulatory comments are adequately addressed.

If you have any questions, please contact me at (916) 255-3664 or Roman Racca, Project Manager, at (916) 255-6407.

Sincerely,



Theresa McGarry
Hazardous Substances Scientist
Office of Military Facilities

cc: Mr. Ronald M. Holland
Veterans Transition Center
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Monterey, California 93940-4799

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Head of School
York School
950 York Road
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Ms. Gail Youngblood
June 30, 2005
Page 4

cc: Mr. Derek Lieberman
Fort Ord Base Realignment and Closure Office
Post Office Box 5004
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Fort Ord Reuse Authority
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Mr. Nick Chulos
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Sacramento, California 94396-0001

Ms. Claire Trombadore
U.S. Environmental Protection Agency
Region IX
75 Hawthorne Street
San Francisco, California 93944-5004

Mr. Grant Himebaugh
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

June 30, 2005

Ms. Gail Youngblood
BRAC Environmental Coordinator
Fort Ord Base Realignment and Closure Office
P.O. Box 5004
Monterey, CA 93944-5004

RE: Revised Finding of Suitability to Transfer (FOST), Track 0 Plug-in C Parcels and Track 1 Parcels, Former Fort Ord, dated May 2005, also known as FOST 9

Dear Ms. Youngblood:

The United States Environmental Protection Agency (EPA) has reviewed FOST 9 as the above referenced document. EPA comments are provided in an attachment to this letter.

Should you have any questions, please contact me at (415) 972-3013.

Sincerely,

A handwritten signature in cursive script that reads "Claire Trombadore".

Claire Trombadore
Remedial Project Manager

cc: Roman Racca, DTSC
Grant Himebaugh, RWQCB

Attachment

**REVIEW OF THE
REVISED FINDING OF SUITABILITY TO TRANSFER
TRACK 0 PLUG-IN C PARCELS AND TRACK 1 PARCELS (FOST 9)
FORMER FORT ORD
MAY 2005**

SPECIFIC COMMENTS

1. **Section 4.1 Environmental Remediation Sites, page 7:** Please note in the text of the first paragraph of this section which parcels the OU2 TCE plume flows under. If possible, please also the maximum concentration are as well as the depth to groundwater. Despite this information being included in various attachments to the FOST please include it in the Section 4.1 text.
2. **Section 4.9 Munitions and Explosives of Concern (MEC), MRS-6 Expansion Area, page 19:** The first sentence in this section states that, "The MRS-6 Expansion Area lies within Parcel E2a, between MRS-6 and MRS-1 (Plate 4)." No mention is made here or elsewhere in the section that the MRS-6 Expansion Area overlaps Parcel E4.1.2.2, Parcel S4.1.1 and possibly Parcel E4.1.2.1 as well. However, Plate 4 appears to show such an overlap (the boundaries of Parcel E4.1.2.1 are not well defined on the plate). In addition, a check of Attachment 3 Tables, Table 2 Track 0 Plug-In Parcels Associated with Track 1 Sites (Group C), reveals that the MRS-6 Expansion Area is not listed in the table as overlapping any of these parcels, to include Parcel E2a. Please review the cited section/plate/table and correct the cited inconsistencies as necessary.
3. **Section 4.9.1 Incidental Military Munitions, page 22:** The first sentence in this section states that, "Military munitions items were found in three parcels within Track 0 areas." This seems to be an all-encompassing statement which could be applied to all of the Track 0 parcels which currently exist at the installation, as well as to any future Track 0 plug-in parcels currently unidentified. The sentence should be revised to apply only to the Track 0 parcels under consideration in this FOST.

In addition, the three parcels listed as having contained incidental military munitions (Parcels E4.3.1.2, E8a.1.1.2, and L20.13.5) do not appear to be the only parcels that meet this criteria. A check of Table 5 Environmental Condition of Property of Attachment 3 Tables reveals that Parcel L20.6 also had incidental military munitions items found within its boundaries. Please review the cited discrepancies and correct them as necessary. Also, please review the documentation of all of the parcels scheduled for transfer as Track 0 parcels for the presence of incidental military munitions and list all which have such items present in Section 4.9.1.

4. **Attachment 2, Environmental Documentation, page 3:** The Army should include the following reference, *Final Landfill Gas Perimeter Probe Monitoring Report, 2003, Operable Unit 2 Landfills, Revision 0 dated November 2004.*

ERRATA

- 1. Section 4.0 Environmental Condition of Property, Community Environmental Response Facilitation Act (CERFA) Report, Parcels L20.15, S3.1.3, and S3.1.4, page 6: The third paragraph in this subsection uses two different sizes of fonts for no apparent reason. Please correct this typographical error.**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 8, 2005

Ms. Gail Youngblood
BRAC Environmental Coordinator
Fort Ord Base Realignment and Closure Office
P.O. Box 5004
Monterey, CA 93944-5004

RE: Revised Finding of Suitability to Transfer (FOST), Track 0 Plug-in C Parcels and Track 1 Parcels, Former Fort Ord, dated May 2005, also known as FOST 9

Dear Ms. Youngblood:

The United States Environmental Protection Agency (EPA) has some additional comments on above referenced document (FOST 9). EPA comments are provided in an attachment to this letter.

Should you have any questions, please contact me at (415) 972-3013.

Sincerely,

A handwritten signature in black ink that reads "Claire Trombadore".

Claire Trombadore
Remedial Project Manager

cc: Roman Racca, DTSC
Grant Himebaugh, RWQCB

Attachment

**ADDITIONAL EPA COMMENTS
REVISED FINDING OF SUITABILITY TO TRANSFER
TRACK 0 PLUG-IN C PARCELS AND TRACK 1 PARCELS (FOST 9)
FORMER FORT ORD
MAY 2005**

SPECIFIC COMMENTS

1. Please add the following language (or something like it) to Attachment 5, Section 7 - Notice re the OU 2 landfills: The landfill gas monitoring probes are sampled quarterly for methane and annually for volatile organic compounds. Monitoring of landfill gas is required for 30 years. The results of the landfill gas monitoring can be found on the Army's web site: www.fortordcleanup.com.

Mr. Robert Carr, EPA Region 9 Office of Regional Counsel, has completed his review of FOST 9 and has the following comments:

1. The language which appears at page 2 of attachment 4, and is repeated at page 3, limiting the CERCLA Covenant does not reflect EPA's understanding of the Army's obligation. The language is based on the notion that a PRP who acquires federal property is not entitled to the statutory covenant; however the Army language does not focus on the status of the parties at the time of the transfer. Any party who acquires contaminated property is a PRP with respect to that property, subject to various defenses. The second sentence which purports to limit the exclusion contained in the first is also flawed because it would allow the Army to avoid its obligation under the CERCLA covenant if any act of the transferee contributed to a release of a hazardous substance remaining on the parcel. For example, if there were construction debris remaining on the parcel the act of the transferee, unknowingly disturbing the debris and releasing asbestos to the environment, could void the Army's obligation to address the asbestos.

This section should be rewritten to focus on the status of the parties at the time of transfer and to make it clear that while the transferee could incur responsibility for improperly dealing with hazardous substance which might be encountered, the primary responsibility for addressing material remaining on the parcel is retained by the Army. EPA would be happy to discuss specific language to accomplish this objective.

2. Paragraphs 6 and 7 both contain broad language limiting the Army's liability (or requiring indemnification) but also include a saving's clause which references the Army's obligation under the CERCLA Covenant. This approach is questionable both because of the ambiguity created by the language and the limitation of the Army's obligation noted above. The transferee should receive a clear statement of the obligations retained by the Army and the obligations it is assuming under the deed.
3. Paragraph 8 contains language which EPA believes is inconsistent with the intention of Congress that the military remain responsible for its contamination. Paragraph 8 places on the Transferee the burden of establishing that any newly discovered contamination was due to the actions of the Army. In addition, the Transferee must show that any release was the result of Army action, thus if the Transferee's action causes or contributes to the

release of Army contamination, the Transferee would be responsible. This section contains no provision acknowledging the Army's statutory obligation. The requirement to obtain written permission prior to disturbing any newly discovered hazardous substances may be unrealistic and could preclude a claim by a Transferee who encountered contamination, properly segregated and managed it and subsequently sought to recover the cost of managing the material from the Army.

4. There is also a reference in Section 5 of Attachment 5 which obligates the transferee to conduct the Army's abatement obligation with respect to LBP. Unless the property was "target housing" as that term is defined under TSCA, federal law does not impose an abatement obligation on the Army. To be protective, the LBP section should require that prior to the use of the property for residential purposes, the transferee take all actions which would have been required had the property been subject to the requirements for "target housing".



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

July 19, 2005

Ms. Gail Youngblood
BRAC Environmental Coordinator
Fort Ord Base Realignment and Closure Office
P.O. Box 5004
Monterey, CA 93944-5004

RE: Revised Finding of Suitability to Transfer (FOST), Track 0 Plug-in C Parcels and Track 1 Parcels, Former Fort Ord, dated May 2005, also known as FOST 9

Dear Ms. Youngblood:

The United States Environmental Protection Agency (EPA) has some additional comments on above referenced document (FOST 9). EPA comments are provided in an attachment to this letter. All other EPA comments on FOST 9 previously submitted (with the exception of those provided by EPA Regional Counsel Robert Carr on July 8, 2005 and reiterated in the attachment to this letter) have been resolved satisfactorily by the Army and EPA need only verify that the changes noted in the Army responses to EPA comments have been incorporated into the FOST, as appropriate.

Should you have any questions, please contact me at (415) 972-3013.

Sincerely,

A handwritten signature in cursive script that reads "Claire Trombadore".

Claire Trombadore
Remedial Project Manager

cc: Roman Racca, DTSC
Grant Himebaugh, RWQCB

Attachment

**ADDITIONAL EPA COMMENTS
REVISED FINDING OF SUITABILITY TO TRANSFER
TRACK 0 PLUG-IN C PARCELS AND TRACK 1 PARCELS (FOST 9)
FORMER FORT ORD
MAY 2005**

SPECIFIC COMMENTS

1. EPA requests that the Army retain a buffer zone of 100 feet surrounding the entire perimeter of the OU 2 landfill.
2. EPA requests that the Army confirm it has an emergency response plan for the OU 2 landfill as required by Section 21130, Article 2, Subchapter 5, Chapter 3, Title 27 of the California Code of Regulations.
3. Based upon discussions with the Army, the following comments, developed by Mr. Robert Carr of the Office of Regional Counsel EPA Region 9 and submitted to the Army on July 8, 2005, shall remain unresolved and attached to the final FOST:

1) The language which appears at page 2 of attachment 4, and is repeated at page 3, limiting the CERCLA Covenant does not reflect EPA's understanding of the Army's obligation. The language is based on the notion that a PRP who acquires federal property is not entitled to the statutory covenant; however the Army language does not focus on the status of the parties at the time of the transfer. Any party who acquires contaminated property is a PRP with respect to that property, subject to various defenses. The second sentence which purports to limit the exclusion contained in the first is also flawed because it would allow the Army to avoid its obligation under the CERCLA covenant if any act of the transferee contributed to a release of a hazardous substance remaining on the parcel. For example, if there were construction debris remaining on the parcel the act of the transferee, unknowingly disturbing the debris and releasing asbestos to the environment, could void the Army's obligation to address the asbestos.

This section should be rewritten to focus on the status of the parties at the time of transfer and to make it clear that while the transferee could incur responsibility for improperly dealing with hazardous substance which might be encountered, the primary responsibility for addressing material remaining on the parcel is retained by the Army. EPA would be happy to discuss specific language to accomplish this objective.

2) Paragraphs 6 and 7 both contain broad language limiting the Army's liability (or requiring indemnification) but also include a saving's clause which references the Army's obligation under the CERCLA Covenant. This approach is questionable both because of the ambiguity created by the language and the limitation of the Army's obligation noted above. The transferee should receive a clear statement of the obligations retained by the Army and the obligations it is assuming under the deed.

3) Paragraph 8 contains language which EPA believes is inconsistent with the intention of Congress that the military remain responsible for its contamination. Paragraph 8 places on the Transferee the burden of establishing that any newly discovered contamination was

due to the actions of the Army. In addition, the Transferee must show that any release was the result of Army action, thus if the Transferee's action causes or contributes to the release of Army contamination, the Transferee would be responsible. This section contains no provision acknowledging the Army's statutory obligation. The requirement to obtain written permission prior to disturbing any newly discovered hazardous substances may be unrealistic and could preclude a claim by a Transferee who encountered contamination, properly segregated and managed it and subsequently sought to recover the cost of managing the material from the Army.

4) There is also a reference in Section 5 of Attachment 5 which obligates the transferee to conduct the Army's abatement obligation with respect to LBP. Unless the property was "target housing" as that term is defined under TSCA, federal law does not impose an abatement obligation on the Army. To be protective, the LBP section should require that prior to the use of the property for residential purposes, the transferee take all actions which would have been required had the property been subject to the requirements for "target housing".

ATTACHMENT 8

ARMY RESPONSE

ARMY RESPONSE TO COMMENTS FROM THE U.S. ENVIRONMENTAL PROTECTION AGENCY (US EPA), REGION IX, RECEIVED BY THE ARMY IN A LETTER DATED JUNE 30, 2005.

Response to Specific Comment 1: Operable Unit 2 (OU2) Landfills is discussed as an environmental remediation site under Section 4.1; however, the groundwater contamination component of OU2 is described in Section 4.2.2 where the Notice of the Presence of Contaminated Groundwater (Section 6) in the Environmental Protection Provisions (EPP, Attachment 5) is also referenced. Per discussion with US EPA on July 7, 2005, the requested information has been added to Section 6 of the EPP.

Response to Specific Comment 2: The description of the MRS-6 Expansion Area in Section 4.9 has been revised to include Parcels E4.1.2.1, E4.1.2.2, and S4.1.1. Plate 4 (Attachment 1) has been revised to include an inset map, which provides more detail of the MRS-6 Expansion Area. Table 2 (Attachment 3) has been revised to list the MRS-6 Expansion Area as a Track 1 Site overlapping Parcels E2a, E4.1.2.1, E4.1.2.2 and S4.1.1.

Response to Specific Comment 3: The first sentence in Section 4.9.1 has been revised to "Incidental military munitions items were found in seven Track 0 parcels that are in this FOST." The list of parcels in Section 4.9.1 has been expanded to include Parcels E4.6.1, E4.6.2, L5.6.1, and L5.6.2, which are described in the Track 0 Plug-in Approval Memorandum – Group C Parcels as parcels where incidental military munitions were found. While incidental military munitions are not discussed in Table 5 (Attachment 3) of the FOST, the boundaries of Parcel L20.6 and MRS-62 are congruent; therefore, any munitions items found within the parcel were not considered incidental. Munitions debris (expended pyrotechnic items) and expended blank small arms ammunition were found in Parcel L20.6 (MRS-62), as described in Sections 4.2.3 and 4.9 of the FOST

Response to Specific Comment 4: The *Final Landfill Gas Perimeter Probe Monitoring Report, 2003, Operable Unit 2 Landfills, Revision 0* had been added to list of references. Additionally, because they are referenced in discussion of the Operable Unit 2 Landfills in the FOST, the perimeter probe monitoring reports from 2000, 2001 and 2002, the *Draft Final Report, 2003 Ambient Air Monitoring and Human Health Risk Assessment, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0* and the *Draft Final Work Plan, Landfill Gas System Expansion, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0* have been added to the list of references.

Response to Errata 1: The cited paragraph in Section 4.0 was corrected to have the same font size throughout.

ARMY RESPONSE TO COMMENTS FROM THE US EPA, REGION IX, RECEIVED BY THE ARMY IN A LETTER DATED JULY 8, 2005.

Response to Additional Comment: Section 7 of the Environmental Protection Provisions (EPP) has been revised to state that the OU2 Landfills perimeter probes are sampled quarterly for methane and annually for volatile organic compounds and this monitoring program will occur for

thirty years from the time of implementation (June 2000) or until written authorization to discontinue monitoring is provided by the appropriate enforcement agency with concurrence by the California Integrated Waste Management Board (CIWMB). It has also been added to the text of Section 7 that the results of perimeter probe monitoring may be found in the annual perimeter probe monitoring report; however, the reference to the Former Fort Ord Environmental Cleanup web site was not added because the EPP language is included in the deed, which is a permanent legal instrument. While it may currently be true that this information may be accessed at the website, this may not be so in the future; however, if future property recipients wish to access this information, they may determine how to do so through the documentation provided as part of the transfer.

Response to Comments 1 through 4: The Army believes the standard language in Attachments 4 and 5 of the FOST is legally sufficient. These comments are considered to be unresolved.

ARMY RESPONSE TO COMMENTS FROM THE US EPA, REGION IX, RECEIVED BY THE ARMY IN A LETTER DATED JULY 19, 2005.

Response to Specific Comment 1: Though not required by applicable regulations, the Army agrees with the US EPA that it is prudent to maintain a buffer zone around the perimeter of the OU2 Landfills. Plate 6 (Attachment 1) of the FOST has been revised to clearly depict the buffer zone around the OU2 Landfills that has already been established by the Army. As indicated on the plate, the buffer zone is 100 feet or greater in width around the majority of the OU2 Landfills Areas. The exceptions are on the north side of Area B and the east side of Area F.

The parcel to the north of Area B (E4.6.2) is a transportation corridor with right-of-ways for proposed Imjin Road widening and a heavy rail line. Based on the available analytical data from perimeter probes at Area B and the intended reuse of Parcel E4.6.2, the Army believes it is not necessary to infringe upon the transportation corridor by widening the buffer zone past the property boundary.

The parcel to the east of Area F (S1.2.2) was transferred in 1997, prior to completion of the engineered landfill cover system and installation of the landfill gas (LFG) monitoring system; therefore, the landfill fence is constructed on the property boundary, which is less than 100 feet from the landfill perimeter. On all other parts of the landfill, the Army property extends beyond the landfill fence line. In response to elevated methane levels detected in perimeter probes on the east side of Area F, the Army started operating a LFG extraction and treatment system in June 2001. This system has since maintained methane concentrations along the fence line adjacent to the eastern side of Area F to less than the 5 percent standard. The Army is in the process of expanding the LFG extraction and treatment system to increase its effectiveness. Based on this, the Army believes LFG will continue to be controlled on the east side of Area F in compliance with Title 27 of the California Code of Regulations (CCR); therefore, it is not necessary to have a 100-foot wide buffer zone in this area.

Additionally, as described in the Response to Additional Comment above, quarterly monitoring of compliance probes will continue for thirty years from the time of implementation (June 2000)

or until written authorization to discontinue monitoring is provided by the appropriate enforcement agency with concurrence by the CIWMB.

Response to Specific Comment 2: The Army does have an emergency response plan for the OU2 Landfills as required by Section 21130, Article 2, Subchapter 5, Chapter 3, Title 27 of the CCR. The emergency response plan may be found in Appendix D of the Post-Closure Operation and Maintenance Plan, Areas B through F Remedial Action, Operable Unit 2 Landfills. The Army is currently revising the emergency response plan to clarify response to LFG release.

Response to Specific Comment 3: The Army believes the standard language in Attachments 4 and 5 of the FOST is legally sufficient. Mr. Carr's comments are included in Attachment 7 of this FOST and remain unresolved.

ARMY RESPONSE TO COMMENTS FROM THE CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY, DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC), RECEIVED BY THE ARMY IN A LETTER DATED JUNE 30, 2005.

Response to Comment 1: The text given in the comment is considered to be an unresolved regulatory comment as shown in Attachment 7 of the FOST; however, it is also noted here that the Army did sample buildings and soil in the Patton Park housing area, which includes Parcels E4.1.2.1, E4.1.2.2, L9.1.1.2 and L9.1.2.2, for lead associated with suspected lead-based paint, as described in Section 4.6 of this FOST.

Response to Comment 2: The Army will proceed with modifying the boundaries of the Fort Ord Hazardous Waste Facility and will request a RCRA Corrective Action Complete Determination as it pertains to parcels in this FOST and the FOST for Track 0 and Track 0 Plug-in B Parcels; therefore, it is not necessary to add this language to the FOST.

Response to Comment 3: Decision documents listed in Table 4 (Attachment 3) and referenced the text of the FOST that require regulatory approvals have been identified and the regulatory approvals appropriately cited.

Response to Comment 4: The Army recognizes DTSC's No Further Action letter also regards the removal of soil impacted by lead-based paint on Parcel L23.3.1; however, the Army believes it is not appropriate to include discussion of this work in the FOST because Parcel L23.3.1 is not part of this FOST. Army environmental remedial actions at Site 39A are described in the FOST because Site 39A is adjacent to a parcel included in this FOST.

Response to Comment 5: Plates 4 and 6 (Attachment 1) of the FOST have been revised to show the aerial extent of the Sites 2 and 12 and Operable Unit 2 groundwater plumes, respectively. Text has also been added to relevant sections of the FOST to indicate that the plume delineations shown on the Plates are based on the Army's understanding of the plumes from analytical data associated with a specific groundwater sampling event in September 2004. The Army agrees with the DTSC's position that the FOST should describe all Installation Restoration Program (IRP) Sites that may impact the Property.

Response to Comment 6: Plate 6 (Attachment 1) of the FOST has been revised to clearly depict the buffer zone around the OU2 Landfills and describe the buffer zone in the Plate Explanation.

Response to Comment 7: The munitions and explosives of concern (MEC) information on Parcel E8a.1.1.2 was incorporated into a revised version of the *Track 0 Plug-in Approval Memorandum, Selected Parcels – Group C, Former Fort Ord, California*, which was issued to the regulatory agencies on July 1, 2005. This information was also incorporated into Section 4.9.1 of the FOST.



Department of Toxic Substances Control



Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA

8800 Cal Center Drive
Sacramento, California 95826-3200

Arnold Schwarzenegger
Governor

August 24, 2005

Ms. Gail Youngblood
BRAC Environmental Coordinator
Fort Ord Base Realignment and Closure Office
Post Office Box 5004
Monterey, California 93944-5004

**CONCURRENCE WITH FINDING OF SUITABILITY TO TRANSFER (FOST) TRACK 0
PLUG-IN C PARCELS, TRACK 1 AND TRACK 1 PLUG-IN PARCELS,
FORMER FORT ORD, MONTEREY, CALIFORNIA, JULY 2005**

Dear Ms. Youngblood:

The Department of Toxic Substances Control (DTSC) has reviewed the FOST for the subject parcels and conditionally concurs that they are suitable to transfer. The parcels, acreage, intended use and recipient are listed in Table 1, attached. This concurrence is contingent upon the following:

- a. Army signing the Land Use Covenant regarding Groundwater Restrictions for Parcels S4.1.1; E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1, and L5.6.2, prior to transfer.
- b. Fort Ord Reuse Authority signing the Land Use Covenant requiring protective measures for structures located within 1000 feet of the landfill (e.g. Parcels E4.3.1.2, L5.6.2, E4.3.2.1, L5.6.1, E4.6.2 and E8a.1.1.2) prior to transfer.
- c. California Department of Parks and Recreation entering into a Agreement and Land Use Covenant to address future monitoring of the beach areas, Parcels S3.1.1, S3.1.2, and S3.1.4 prior to transfer.

Please attach the following comment regarding lead-based paint to the FOST as an unresolved regulatory comment:

There are buildings on some of these Parcels that probably contain lead-based paint, and this paint may have fallen off the buildings into the soil. Further, the Army did not sample the buildings or the soil for lead-based paint. DTSC's position is that any soils surrounding structures containing

Ms. Gail Youngblood
August 24, 2005
Page 2

lead-based paint should first be evaluated by property owners for releases of lead-based paint to soils prior to the property being used for residential or other sensitive uses.

The FOST contains a section entitled "Environmental Protection Provisions". These provisions will be part of the deed and include a section on lead-based paint which states that the property recipient shall not permit the occupancy or use any of the buildings or structures on the property as residential real property without complying with applicable federal, state and local laws and regulations pertaining to lead based paint hazards. Please be advised that "lead based paint hazards" include lead contamination in soil from lead based paint. DTSC intends to work with all parties to assure the Army's Environmental Protection Provisions and the State law and regulations are complied with regarding lead contaminated soil on former Fort Ord.

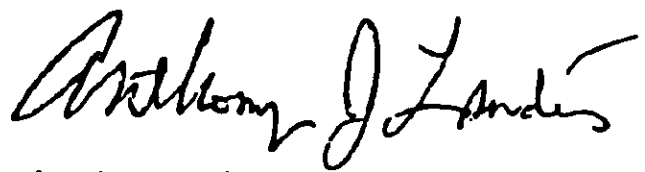
Because Fort Ord operated as a Resource Conservation and Recovery Act (RCRA) hazardous waste facility, the owner is required to conduct corrective action for any release or potential release of hazardous substances on the whole facility. The "facility," defined as the Fort Ord Hazardous Waste Facility, is the entire base within the original base boundary. In order to remove this potential corrective action liability for any current or future owners of former Fort Ord property, DTSC must make a Correction Action Complete Determination and Facility Boundary Modification in accordance with the California Hazardous Waste Control Law. This determination officially recognizes that all releases and potential releases of hazardous substances have been addressed pursuant to RCRA and terminates RCRA liability that could potentially be imposed upon future transferees. The boundary modification removes the property from the Fort Ord Hazardous Waste Facility. The Army has agreed to request a RCRA Corrective Action Complete Determination for these parcels. This Determination must be completed prior to transfer to prevent the transferee from incurring RCRA liabilities upon ownership of the property.

DTSC reserves the right to address any appropriate environmental or human health related issues should additional information concerning the environmental condition of subject property become available in the future.

Ms. Gail Youngblood
August 24, 2005
Page 3

Finally, please note that should this property be considered for the proposed acquisition and/or construction of school properties utilizing state funding, a separate environmental review process in compliance with California Education Code 12710 et. seq, will need to be conducted and approved by DTSC.

If you have any questions, please contact me at (916) 255-3732 or Theresa McGarry of my staff at (916) 255-3664.



Anthony J. Landis, P.E.
Chief
Northern California Operations
Office of Military Facilities

Attachment

cc: Mr. Nick Chulos
Principal Administrative Analyst
County of Monterey
230 Church Street, Building 3
Salinas, California 93901

Mr. Ronald M. Holland
Veterans Transition Center
220 12th street
Marina, California 93933

Mr. Derek Lieberman
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Mr. Michael Houlemard
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100 12th Street, Building 2880
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Ms. Gail Youngblood

August 24, 2005

Page 4

cc: Ms. Claire Trombadore
U.S. Environmental Protection Agency
Region IX
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Mr. David Murray
Department of Transportation
50 Higuera Street
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Mr. Grant Himebaugh
Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, California 93401-7906

Table 1 – Description of Property

Parcel Number (Acreage)	Recipient	Intended Reuse	Facility Number(s)	ACM Present	LBP Present ¹
E11a (147)	FORA	Habitat Management	No buildings or structures	---	No buildings or structures
E11b.6.2 (18)	FORA	Development/Mixed Use	No buildings or structures	---	No buildings or structures
E15.2 (29)	FORA	Open Space	No buildings or structures	---	No buildings or structures
E20c.2.1 (25)	FORA	Future Housing	No buildings or structures	---	No buildings or structures
E2a (63)	FORA	Development/Mixed Use	No buildings or structures	---	No buildings or structures
E4.1.2.1 (10)	FORA	Housing	8726 - 8727	Yes	Yes
			8708	Yes	Yes
			8568 - 8569	Yes	Yes
			8560 - 8562	Yes	Yes
			8555	Yes	Yes
			8529	Yes	Yes
			8515	Yes	Yes
E4.1.2.2 (26)	FORA	Housing	8516 - 8528	Yes	Yes
			8709 - 8717	Yes	Yes
			8727 - 8731	Yes	Yes
			8563 - 8568	Yes	Yes
		Sewage Pump Station	8775	Not Surveyed	Yes
E4.1.2.3 (1)	FORA	Right-of-way, Booker Street	No buildings or structures	---	No buildings or structures
E4.3.1.2 (1)	FORA	Housing	No buildings or structures	---	No buildings or structures
E4.3.2.1 (46)	FORA	Housing	6016 - 6019	Yes	No
			6021 - 6024	Yes	No
			6026 - 6073	Yes	No
			6078 - 6079	Yes	No
		Sewage Pump Station	6143	No	No

Table 1 - Description of Property

Parcel Number (Acreage)	Recipient	Intended Reuse	Facility Number(s)	ACM Present	LBP Present ¹
E4.6.1 (25)	FORA	Right-of-way, Imjin Road	No buildings or structures	---	No buildings or structures
E4.6.2 (17)	FORA	Right-of-way, Imjin Road	5871	No	Yes
			5871A	Not Surveyed	Yes
E8a.1.1.2 (85)	FORA	Non-irrigated Open Space	4A39	Not Surveyed	Yes
L20.13.5 (7)	FORA	Right-of-way, South Boundary Road	No buildings or structures	---	No buildings or structures
L20.14.1.1 (8)	FORA	Right-of-way, Intergarrison Road	No buildings or structures	---	No buildings or structures
L20.14.2 (3)	FORA	Right-of-way, Intergarrison Road	No buildings or structures	---	No buildings or structures
L20.15 (20)	FORA	Development	No buildings or structures	---	No buildings or structures
L20.6 (247)	Monterey County	Laguna Seca Park	No buildings or structures	---	No buildings or structures
L23.5.1 (15)	Monterey Peninsula College	School	4360 - 4367	4360-4366 Yes (4367 - not surveyed)	Yes
L31 (12)	Veterans Transition Center	Housing	No buildings or structures	---	No buildings or structures
L5.6.1 (23)	FORA	Development/Mixed Use	No buildings or structures	---	No buildings or structures
L5.6.2 (8)	FORA	Marina Park Offices	6009 - 6010	Yes	No
			6014 - 6015	Yes	No
L9.1.1.2 (2)	Veterans Transition Center	Housing	8714 - 8719	Yes	Yes
L9.1.2.2 (2)	Veterans Transition Center	Housing	8732 - 8735	Yes	Yes
S3.1.1 (477)	California Department of Parks and Recreation	State Park	5989	Not Surveyed	Yes
			2066	Yes	Yes
			2076A - 2076I	2076A - B and 2076D - I yes, 2076C no	Yes

Table 1 – Description of Property

Parcel Number (Acreage)	Recipient	Intended Reuse	Facility Number(s)	ACM Present	LBP Present ¹
			2076J – 2076S	Not surveyed	Yes
			TR9070	Yes	No
			2019	No	Yes
			922	No	Yes
			924	No	Yes
			914 - 915	No	Yes
			919	No	Yes
			919A	Not surveyed	Yes
S3.1.2 (468)	California Department of Parks and Recreation	State Park	No buildings or structures	---	No buildings or structures
S3.1.3 (22)	California Department of Parks and Recreation	State Park	1A99	Yes	Yes
S3.1.4 (13)	California Department of Parks and Recreation	State Park	916	No	Yes
S4.1.1 (72)	Caltrans	Right-of-way, Highway 1	No buildings or structures	---	No buildings or structures

¹ The presence or absence of lead-based paint (LBP) is assumed based on the date of construction. If the date of construction is not known, it is assumed that the building contains LBP.

**AMENDMENT #1
to the
FINDING OF SUITABILITY TO TRANSFER
(FOST)
FORMER FORT ORD, CALIFORNIA
TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1 PLUG-IN PARCELS**

October 2005

**AMENDMENT #1
FINDING OF SUITABILITY TO TRANSFER (FOST)
FORMER FORT ORD, CALIFORNIA
TRACK 0 PLUG-IN C, TRACK 1 AND TRACK 1 PLUG-IN PARCELS**

1.0 PURPOSE

The purpose of this Amendment is to modify Section 2 Subparagraph A (2) (LAND USE RESTRICTIONS, Groundwater Restriction) and Section 6 (NOTICE OF THE PRESENCE OF CONTAMINATED GROUNDWATER) of the Environmental Protection Provisions (EPP, Attachment 5 of the FOST) to reflect which notice of the presence of contaminated groundwater is required for the parcels referred to in the EPP's table of Applicable Notices. More specifically this amendment will clarify which parcels of property are within particular "Groundwater Protection Zones" and therefore require a specific notice to be included in the deeds for those parcels.

2.0 BACKGROUND

Because of concerns about the extent of future development at the former Fort Ord, its potential impact on groundwater remedial activities, and protection of public health and the environment, Monterey County promulgated an ordinance in 1999 that established a "Special Groundwater Protection Zone" at the former Fort Ord. Within this zone, property recipients are restricted from drilling new water wells. The Special Groundwater Protection Zone is divided into the "Prohibition Zone," where construction of water wells is prohibited, and the "Consultation Zone," where the County evaluates water well permit applications on a case-by-case basis in consultation with the Army, U.S. EPA Region IX, California Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (RWQCB). Additionally, the DTSC has required for previous FOSTs the Army to be party to a Covenant to Restrict Use of Property Covenant (CRUP) for each group of properties being transferred that were located within the Special Groundwater Protection Zone.

During development of this FOST, the DTSC determined it only had regulatory authority to enforce CRUPs on property within the Prohibition Zone, but not the Consultation Zone. The Army revised the list of parcels requiring a CRUP accordingly; however, after the FOST was finalized, the Army determined the table of Applicable Notices in the EPP still indicated all parcels within the Special Groundwater Protection Zone required the Notice of Contaminated Groundwater, which describes all such parcels as being included in a CRUP. As a result, the Notice of Contaminated Groundwater was inappropriately included in the draft deeds for property within the Consultation Zone based on the information in the table of Applicable Notices.

OCT 19 2005

3.0 REGULATORY/PUBLIC COMMENT

A copy of this FOST Amendment will be distributed to the US EPA Region IX, the DTSC and the RWQCB. The Army will include this FOST Amendment as part of its Administrative Record for the former Fort Ord, California.

4.0 FINDING OF SUITABILITY TO TRANSFER

Based on the above information, I have concluded that all DOD requirements to reach a Finding of Suitability to Transfer have been fully met for the Property, subject to the terms and conditions set forth in the Environmental Protection Provisions, as modified (Attachment 5).



OCT 19 2005

Thomas E. Lederle
Director, Hampton Field Office
Army BRAC

Enclosure
Attachment 5, Environmental Protection Provisions Sections 2 and 6 as amended.

ATTACHMENT 5

ENVIRONMENTAL PROTECTION PROVISIONS

2. LAND USE RESTRICTIONS

A. The United States Department of the Army (Army) has undertaken careful environmental study of the Property and concluded that the land use restrictions set forth below are required to ensure protection of human health and the environment. The Grantee, its successors or assigns, shall not undertake nor allow any activity on or use of the property that would violate the land use restrictions contained herein.

2) **Groundwater Restriction.** As described in the NOTICE OF THE PRESENCE OF CONTAMINATED GROUNDWATER, the Grantee is hereby informed and acknowledges that the groundwater under portions of the Property and associated with the Sites 2 and 12 (Sites 2/12) groundwater plume and the Operable Unit 2 (OU2) groundwater plume is contaminated with volatile organic compounds (VOCs), primarily trichloroethene (TCE). In accordance with the provisions of Section 6 of the Environmental Protection Provisions, the Grantee, its successors and assigns shall not access or use groundwater underlying the Property for any purpose. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

6. NOTICE OF THE PRESENCE OF CONTAMINATED GROUNDWATER

For Parcels E2a, E4.1.2.1, E4.1.2.2, E4.1.2.3, E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1, L5.6.2, L9.1.1.2, L9.1.2.2, S3.1.1 and S4.1.1:

A. The groundwater beneath portions of the Property is contaminated with volatile organic compounds (VOCs), primarily trichloroethene (TCE). The most recent data available (Annual Report of Quarterly Monitoring, October 2003 through September 2004) indicates that:

- 1) Parcel S4.1.1 overlies the Sites 2/12 groundwater plume where the concentration of TCE in groundwater equals or exceeds 5.0 micrograms per liter ($\mu\text{g/L}$). For the Sites 2/12 groundwater plume area the maximum TCE concentration in the groundwater beneath the Property (Parcel S4.1.1) is between 5.0 $\mu\text{g/L}$ and 10 $\mu\text{g/L}$ and depth to groundwater is 68 to 75 feet below ground surface.
- 2) Parcels E4.3.1.2, E4.3.2.1, E4.6.1, E4.6.2, E8a.1.1.2, L5.6.1 and L5.6.2 overlie the OU2 groundwater plume where the concentration of TCE in groundwater exceeds 5.0 $\mu\text{g/L}$. For the OU2 groundwater plume area the maximum TCE concentration in the groundwater beneath the Property (Parcel E4.3.1.2) is 26 $\mu\text{g/L}$ as measured in groundwater extraction well EW-OU2-12A and depth to groundwater is 125 to 175 feet below ground surface.

B. The maximum concentrations of the chemicals of concern (associated with the OU2 and Sites 2/12 groundwater plumes) detected in the groundwater monitoring or extraction wells on the Property (September 2004) are listed below. The quantity released of these compounds is unknown. The OU2 and Sites 2/12 groundwater aquifer cleanup levels (ACLs), presented in the OU2 Fort Ord Landfills Record of Decision (ROD) (July 1994) and Basewide Remedial Investigation Sites ROD (January 1997), are provided for comparison.

**Chemicals of Concern in Groundwater and Aquifer Cleanup Levels
(OU2 and Sites 2/12 Plumes)**

Chemical Name	Regulatory Synonym	CASRN*	RCRA Waste Number	Parcel	Well (EW-OU2)	Maximum Concentrations (µg/L)	ACL (µg/L)
Benzene	Benzol	71432	U019	E4.3.1.2	-10-A	0.3	1.0
Carbon Tetrachloride	Methane, tetrachloro-	56235	U211			ND	0.5
Chloroform	Methane, trichloro-	67663	U044	E4.3.1.2	-12-A	2.3	2.0
1,1-Dichloroethane	Ethane, 1,1-dichloro-	75343	U076	E4.3.1.2	-10-A	6.9	5.0
1,2-Dichloroethane	Ethane, 1,2-dichloro-	107062	U077	E4.3.1.2	-10-A	1.5	0.5
1,1-Dichloroethene	Ethene, 1,1-dichloro-	75354	U078			ND	6.0
Cis-1,2-Dichloroethene	Ethene, 1,2-dichloro(E)	156605	U079	E4.3.1.2	-10-A	8.9	6.0
1,2-Dichloropropane	Propane, 1,2-dichloro-	78875	U083	E4.3.1.2	-12-A	1.3	1.0
Total 1,3-Dichloropropene	Propene, 1,3-dichloro-	542756	--			ND	0.5
Methylene Chloride	Methane, dichloro-	75092	U080			ND	5.0
Tetrachloroethene	Ethene, tetrachloro-	127184	U210	E4.3.1.2	-10-A	5.4	3.0
Trichloroethene	Ethene, trichloro-	79016	U228	E4.3.1.2	-12-A	26	5.0
Vinyl chloride	Ethene, chloro-	75014	U043	E4.3.1.2	-10-A	0.7	0.1

*Chemical Abstract Services Registry Number

C. Restrictions and Conditions

- 1) The property is within the "Prohibition Zone" of the "Special Groundwater Protection Zone." A Covenant to Restrict the Use of Property (CRUP) for the property will be established between the United States Army and the State of California (DTSC and the California Regional Water Quality Control Board, Central Coast Region). The Prohibition Zone encompasses the area overlying or adjacent to the four identified groundwater contamination plumes at the former Fort Ord. The Prohibition Zone is identified on the "Former Fort Ord Special Groundwater Protection Zone Map" (the Map), which is on file with the County of Monterey (the County). County Ordinance No. 04011 prohibits the construction of water wells within the Prohibition Zone.

- 2) The Grantee covenants for itself, its successors, and assigns not to access or use groundwater underlying the Property for any purpose. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
- 3) The Grantee covenants for itself, its successors, and assigns that neither the Grantee, its successors or assigns, nor any other person or entity acting for or on behalf of the Grantee, its successors or assigns, shall interfere with any response action being taken on the Property by or on behalf of the Grantor, or interrupt, relocate, or otherwise interfere or tamper with any remediation system or monitoring wells now or in the future located on, over, through, or across any portion of the Property without the expressed written consent of the Grantor in each case first obtained.
- 4) The Grantee covenants for itself, its successors, or assigns, that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

For Parcels E11a, E11b.6.2, E15.2, E20c.2.1, L20.14.1.1, L20.14.2, L20.15, S3.1.2, S3.1.3, and S3.1.4:

- A. The Property is within the "Consultation Zone" of the "Special Groundwater Protection Zone." The Consultation Zone includes areas surrounding the "Prohibition Zone" where groundwater extraction may impact or be impacted by the four identified groundwater contamination plumes at the former Fort Ord. The Consultation Zone is also identified on the "Former Fort Ord Special Groundwater Protection Zone Map," which is on file with the County of Monterey (the County). County Ordinance No. 04011 requires consultation with the Grantor, the US EPA, the DTSC, the RWQCB and the County for proposed water well construction within the Consultation Zone.
- B. The Grantee covenants for itself, its successors, and assigns not to access or use groundwater underlying the Property for any purpose without the prior written approval of the Grantor, the US EPA, the DTSC, the RWQCB and the County. For the purpose of this restriction, "groundwater" shall have the same meaning as in section 101(12) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).
- C. The Grantee covenants for itself, its successors, and assigns that neither the Grantee, its successors or assigns, nor any other person or entity acting for or on behalf of the Grantee, its successors or assigns, shall interfere with any response action being taken on the Property by or on behalf of the Grantor, or interrupt, relocate, or otherwise interfere or tamper with any remediation system or monitoring wells now or in the future located on, over, through, or across any portion of the Property without the expressed written consent of the Grantor in each case first obtained.
- D. The Grantee covenants for itself, its successors, or assigns, that it will not undertake nor allow any activity on or use of the Property that would violate the restrictions contained

herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable

END OF DOCUMENT

END OF DOCUMENT

ACTIVITY AND USE LIMITATIONS (AULS) EXHIBITS

Appendix D Radius Report

Appendix E Radius Report

Not Reported

Not Reported

Seaside, CA 93955

Inquiry Number: 7299418.2s

April 05, 2023

The EDR Radius Map™ Report with GeoCheck®



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Thank you for your business.
 Please contact EDR at 1-800-352-0050
 with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NOT REPORTED
SEASIDE, CA 93955

COORDINATES

Latitude (North): 36.6447610 - 36° 38' 41.13"
Longitude (West): 121.8141010 - 121° 48' 50.76"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 606010.2
UTM Y (Meters): 4055918.2
Elevation: 173 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map: 12021485 MARINA, CA
Version Date: 2018

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from: 20140613
Source: USDA

MAPPED SITES SUMMARY

Target Property Address:
 NOT REPORTED
 SEASIDE, CA 93955

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	FORT ORD	FORMER ARMY BASE FOR	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-LQG, US ENG..	Same	1 ft.
1	MISSION MEMORIAL PAR	3301 MONTEREY BLDG 4	CUPA Listings	Higher	1081, 0.205, SSE
2	6 ARMY RD.,(1800 GAL	100 CALIFORNIA (900	Notify 65	Higher	1424, 0.270, South
3	FORT ORD STATE PARK-	INTERSECTION OF HWY	ENVIROSTOR, DEED	Lower	3482, 0.659, NW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

Proposed NPL..... Proposed National Priority List Sites
NPL LIENS..... Federal Superfund Liens

Lists of Federal Delisted NPL sites

Delisted NPL..... National Priority List Deletions

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY..... Federal Facility Site Information listing

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE..... Superfund Enterprise Management System Archive

Lists of Federal RCRA generators

RCRA-SQG..... RCRA - Small Quantity Generators
RCRA-VSQG..... RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

Federal institutional controls / engineering controls registries

LUCIS..... Land Use Control Information System

Federal ERNS list

ERNS..... Emergency Response Notification System

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE..... State Response Sites

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF..... Solid Waste Information System

EXECUTIVE SUMMARY

Lists of state and tribal leaking storage tanks

LUST..... Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST..... Leaking Underground Storage Tanks on Indian Land
CPS-SLIC..... Statewide SLIC Cases

Lists of state and tribal registered storage tanks

FEMA UST..... Underground Storage Tank Listing
UST..... Active UST Facilities
AST..... Aboveground Petroleum Storage Tank Facilities
INDIAN UST..... Underground Storage Tanks on Indian Land

Lists of state and tribal voluntary cleanup sites

VCP..... Voluntary Cleanup Program Properties
INDIAN VCP..... Voluntary Cleanup Priority Listing

Lists of state and tribal brownfield sites

BROWNFIELDS..... Considered Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT..... Waste Management Unit Database
SWRCY..... Recycler Database
HAULERS..... Registered Waste Tire Haulers Listing
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
IHS OPEN DUMPS..... Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL..... Delisted National Clandestine Laboratory Register
HIST Cal-Sites..... Historical Calsites Database
SCH..... School Property Evaluation Program
CDL..... Clandestine Drug Labs
CERS HAZ WASTE..... CERS HAZ WASTE
Toxic Pits..... Toxic Pits Cleanup Act Sites
US CDL..... National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

SWEEPS UST..... SWEEPS UST Listing
HIST UST..... Hazardous Substance Storage Container Database
CA FID UST..... Facility Inventory Database

EXECUTIVE SUMMARY

CERS TANKS..... California Environmental Reporting System (CERS) Tanks

Local Land Records

LIENS..... Environmental Liens Listing
LIENS 2..... CERCLA Lien Information
DEED..... Deed Restriction Listing

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System
CHMIRS..... California Hazardous Material Incident Report System
LDS..... Land Disposal Sites Listing
MCS..... Military Cleanup Sites Listing
SPILLS 90..... SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR..... RCRA - Non Generators / No Longer Regulated
FUDS..... Formerly Used Defense Sites
DOD..... Department of Defense Sites
SCRD DRYCLEANERS..... State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR..... Financial Assurance Information
EPA WATCH LIST..... EPA WATCH LIST
2020 COR ACTION..... 2020 Corrective Action Program List
TSCA..... Toxic Substances Control Act
TRIS..... Toxic Chemical Release Inventory System
SSTS..... Section 7 Tracking Systems
RMP..... Risk Management Plans
RAATS..... RCRA Administrative Action Tracking System
PRP..... Potentially Responsible Parties
PADS..... PCB Activity Database System
ICIS..... Integrated Compliance Information System
FTTS..... FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS..... Material Licensing Tracking System
COAL ASH DOE..... Steam-Electric Plant Operation Data
COAL ASH EPA..... Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER..... PCB Transformer Registration Database
RADINFO..... Radiation Information Database
HIST FTTS..... FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS..... Incident and Accident Data
CONSENT..... Superfund (CERCLA) Consent Decrees
INDIAN RESERV..... Indian Reservations
FUSRAP..... Formerly Utilized Sites Remedial Action Program
UMTRA..... Uranium Mill Tailings Sites
LEAD SMELTERS..... Lead Smelter Sites
US AIRS..... Aerometric Information Retrieval System Facility Subsystem
US MINES..... Mines Master Index File
ABANDONED MINES..... Abandoned Mines
FINDS..... Facility Index System/Facility Registry System
DOCKET HWC..... Hazardous Waste Compliance Docket Listing
ECHO..... Enforcement & Compliance History Information
UXO..... Unexploded Ordnance Sites
FUELS PROGRAM..... EPA Fuels Program Registered Listing

EXECUTIVE SUMMARY

PFAS FEDERAL SITES.....	Federal Sites PFAS Information
PFAS TSCA.....	PFAS Manufacture and Imports Information
PFAS RCRA MANIFEST.....	PFAS Transfers Identified In the RCRA Database Listing
PFAS ATSDR.....	PFAS Contamination Site Location Listing
PFAS WQP.....	Ambient Environmental Sampling for PFAS
PFAS NPDES.....	Clean Water Act Discharge Monitoring Information
PFAS ECHO.....	Facilities in Industries that May Be Handling PFAS Listing
PFAS ECHO FIRE TRAINING.....	Facilities in Industries that May Be Handling PFAS Listing
PFAS PART 139 AIRPORT.....	All Certified Part 139 Airports PFAS Information Listing
AQUEOUS FOAM NRC.....	Aqueous Foam Related Incidents Listing
PFAS.....	PFAS Contamination Site Location Listing
AQUEOUS FOAM.....	Former Fire Training Facility Assessments Listing
CA BOND EXP. PLAN.....	Bond Expenditure Plan
Cortese.....	"Cortese" Hazardous Waste & Substances Sites List
DRYCLEANERS.....	Cleaner Facilities
EML.....	Emissions Inventory Data
ENF.....	Enforcement Action Listing
Financial Assurance.....	Financial Assurance Information Listing
ICE.....	ICE
HIST CORTESE.....	Hazardous Waste & Substance Site List
HWP.....	EnviroStor Permitted Facilities Listing
HWT.....	Registered Hazardous Waste Transporter Database
HAZNET.....	Facility and Manifest Data
MINES.....	Mines Site Location Listing
MWMP.....	Medical Waste Management Program Listing
NPDES.....	NPDES Permits Listing
PEST LIC.....	Pesticide Regulation Licenses Listing
PROC.....	Certified Processors Database
HAZMAT.....	Hazardous Material Facilities
UIC.....	UIC Listing
UIC GEO.....	UIC GEO (GEOTRACKER)
WASTEWATER PITS.....	Oil Wastewater Pits Listing
WDS.....	Waste Discharge System
WIP.....	Well Investigation Program Case List
MILITARY PRIV SITES.....	MILITARY PRIV SITES (GEOTRACKER)
PROJECT.....	PROJECT (GEOTRACKER)
WDR.....	Waste Discharge Requirements Listing
CIWQS.....	California Integrated Water Quality System
CERS.....	CERS
NON-CASE INFO.....	NON-CASE INFO (GEOTRACKER)
OTHER OIL GAS.....	OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS.....	PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT.....	SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ.....	Well Stimulation Project (GEOTRACKER)
HWTS.....	Hazardous Waste Tracking System
PFAS TRIS.....	List of PFAS Added to the TRI
MINES MRDS.....	Mineral Resources Data System

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historical Auto Stations

EXECUTIVE SUMMARY

EDR Hist Cleaner..... EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF..... Recovered Government Archive Solid Waste Facilities List
RGA LUST..... Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.

Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in **bold italics** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 01/25/2023 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD Cerclis ID:: 902783 EPA Id: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

Lists of Federal sites subject to CERCLA removals and CERCLA orders

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 01/25/2023 has revealed that there is 1 SEMS

EXECUTIVE SUMMARY

site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD Site ID: 0902783 EPA Id: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/06/2023 has revealed that there is 1 CORRACTS site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD EPA ID:: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/06/2023 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD EPA ID:: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

Lists of Federal RCRA generators

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/06/2023 has revealed that there is 1

EXECUTIVE SUMMARY

RCRA-LQG site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD EPA ID:: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 10/27/2022 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD EPA ID:: CA7210020676 EPA ID:: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

US INST CONTROLS: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROLS list, as provided by EDR, and dated 10/27/2022 has revealed that there is 1 US INST CONTROLS site within approximately 0.5 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD EPA ID:: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 10/24/2022 has revealed that there is 1 ENVIROSTOR site within approximately 1 mile of the target property.

<u>Lower Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD STATE PARK-	INTERSECTION OF HWY	NW 1/2 - 1 (0.659 mi.)	3	127

EXECUTIVE SUMMARY

Facility Id: 80001207
Status: Active

ADDITIONAL ENVIRONMENTAL RECORDS

Other Ascertainable Records

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 01/25/2023 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD EPA ID:: CA7210020676	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

PFAS NPL: EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

A review of the PFAS NPL list, as provided by EDR, and dated 02/23/2022 has revealed that there is 1 PFAS NPL site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
FORT ORD	FORMER ARMY BASE FOR	0 - 1/8 (0.000 mi.)	0	9

CUPA Listings: A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

A review of the CUPA Listings list, as provided by EDR, has revealed that there is 1 CUPA Listings site within approximately 0.25 miles of the target property.

<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
MISSION MEMORIAL PAR Database: CUPA MONTEREY, Date of Government Version: 10/04/2021	3301 MONTEREY BLDG 4	SSE 1/8 - 1/4 (0.205 mi.)	1	126

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 12/07/2022 has revealed that there is 1

EXECUTIVE SUMMARY

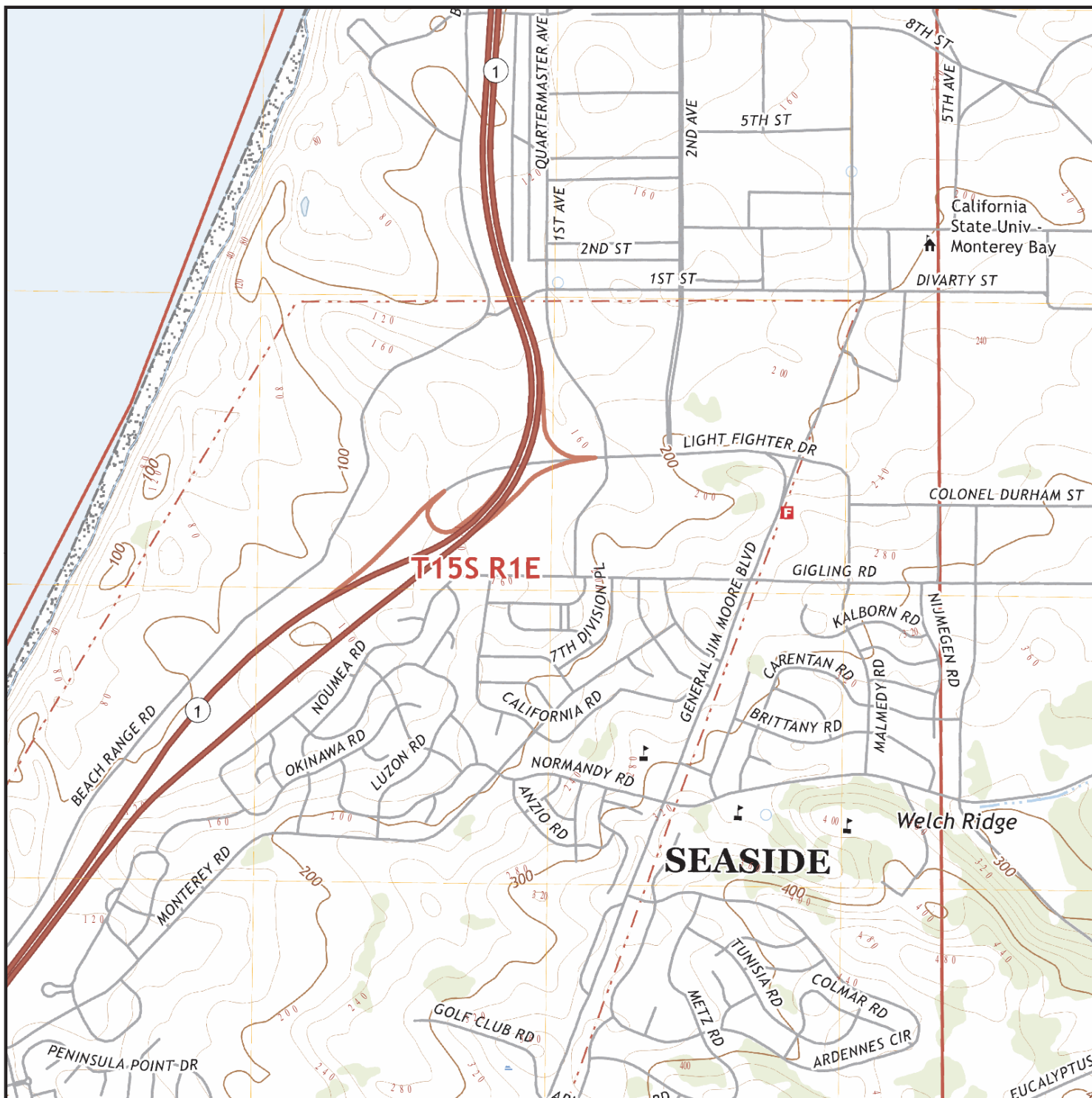
Notify 65 site within approximately 1 mile of the target property.







<u>Equal/Higher Elevation</u>	<u>Address</u>	<u>Direction / Distance</u>	<u>Map ID</u>	<u>Page</u>
6 ARMY RD.,(1800 GAL	100 CALIFORNIA (900	S 1/4 - 1/2 (0.270 mi.)	2	127

EXECUTIVE SUMMARY


There were no unmapped sites in this report.

OVERVIEW MAP - 7299418.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  National Priority List Sites
-  Dept. Defense Sites

-  Indian Reservations BIA
-  Power transmission lines
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  National Wetland Inventory
-  State Wetlands

-  Areas of Concern

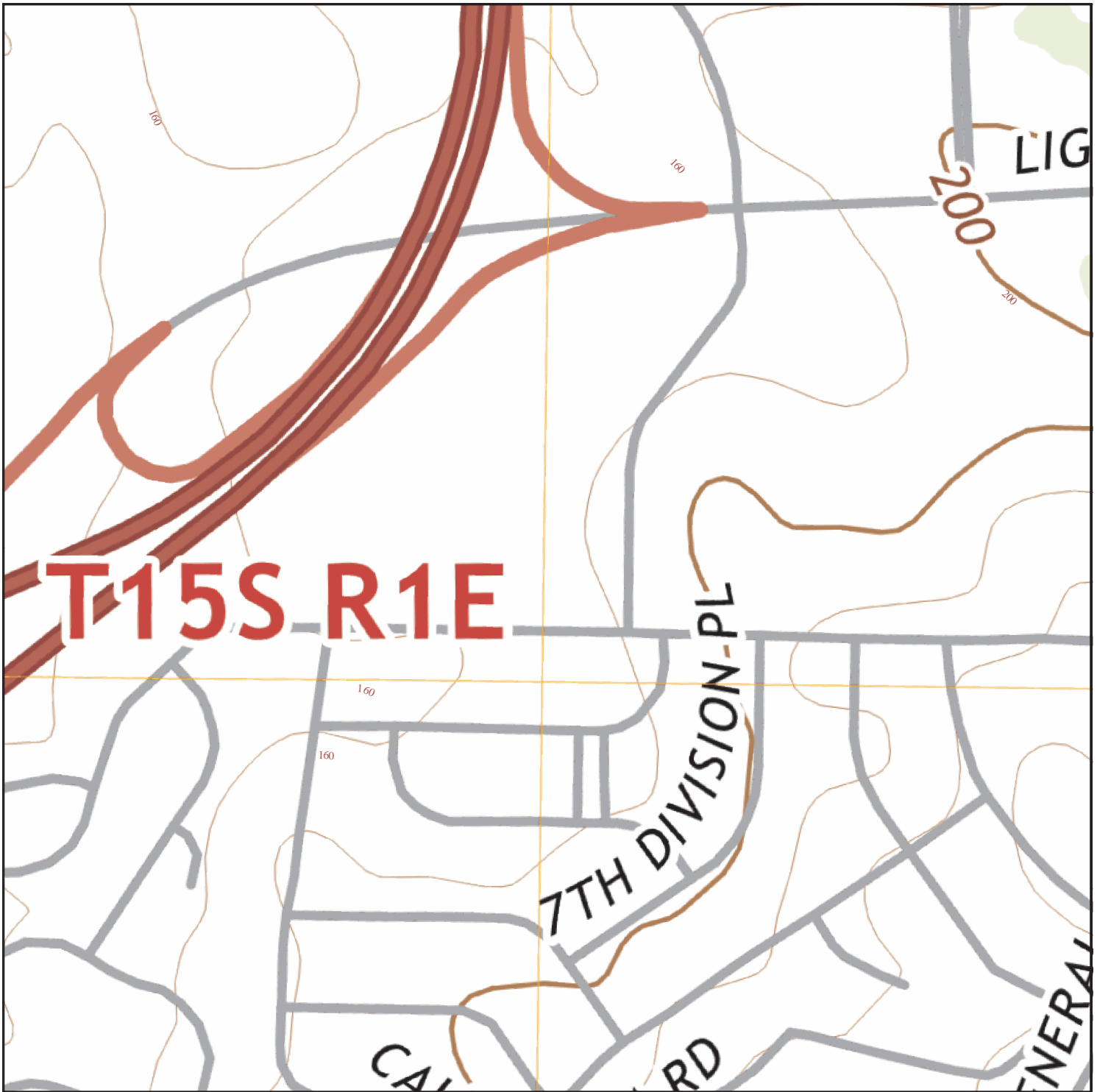









This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Not Reported
 ADDRESS: Not Reported
 Seaside CA 93955
 LAT/LONG: 36.644761 / 121.814101





CLIENT: Kimley Horn & Associates, Inc.
 CONTACT: Kiana Graham
 INQUIRY #: 7299418.2s
 DATE: April 05, 2023 9:47 am

DETAIL MAP - 7299418.2S



-  Target Property
-  Sites at elevations higher than or equal to the target property
-  Sites at elevations lower than the target property
-  Manufactured Gas Plants
-  Sensitive Receptors
-  National Priority List Sites
-  Dept. Defense Sites



-  Indian Reservations BIA
-  Special Flood Hazard Area (1%)
-  0.2% Annual Chance Flood Hazard
-  Areas of Concern



This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: Not Reported ADDRESS: Not Reported Seaside CA 93955 LAT/LONG: 36.644761 / 121.814101	CLIENT: Kimley Horn & Associates, Inc. CONTACT: Kiana Graham INQUIRY #: 7299418.2s DATE: April 05, 2023 9:49 am
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
<i>Lists of Federal NPL (Superfund) sites</i>								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	1.000		0	0	0	0	NR	0
<i>Lists of Federal Delisted NPL sites</i>								
Delisted NPL	1.000		0	0	0	0	NR	0
<i>Lists of Federal sites subject to CERCLA removals and CERCLA orders</i>								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
<i>Lists of Federal CERCLA sites with NFRAP</i>								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
<i>Lists of Federal RCRA facilities undergoing Corrective Action</i>								
CORRACTS	1.000		1	0	0	0	NR	1
<i>Lists of Federal RCRA TSD facilities</i>								
RCRA-TSDF	0.500		1	0	0	NR	NR	1
<i>Lists of Federal RCRA generators</i>								
RCRA-LQG	0.250		1	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-VSQG	0.250		0	0	NR	NR	NR	0
<i>Federal institutional controls / engineering controls registries</i>								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROLS	0.500		1	0	0	NR	NR	1
<i>Federal ERNS list</i>								
ERNS	TP		NR	NR	NR	NR	NR	0
<i>Lists of state- and tribal (Superfund) equivalent sites</i>								
RESPONSE	1.000		0	0	0	0	NR	0
<i>Lists of state- and tribal hazardous waste facilities</i>								
ENVIROSTOR	1.000		0	0	0	1	NR	1
<i>Lists of state and tribal landfills and solid waste disposal facilities</i>								
SWF/LF	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
<i>Lists of state and tribal leaking storage tanks</i>								
LUST	0.500		0	0	0	NR	NR	0
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal registered storage tanks</i>								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
<i>Lists of state and tribal voluntary cleanup sites</i>								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
<i>Lists of state and tribal brownfield sites</i>								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
<u>ADDITIONAL ENVIRONMENTAL RECORDS</u>								
<i>Local Brownfield lists</i>								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Landfill / Solid Waste Disposal Sites</i>								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
<i>Local Lists of Hazardous waste / Contaminated Sites</i>								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		0	0	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
<i>Local Lists of Registered Storage Tanks</i>								
SWEEPS UST	0.250		0	0	NR	NR	NR	0
HIST UST	0.250		0	0	NR	NR	NR	0
CA FID UST	0.250		0	0	NR	NR	NR	0
CERS TANKS	0.250		0	0	NR	NR	NR	0
<i>Local Land Records</i>								
LIENS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		1	0	0	0	NR	1
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
PFAS NPL	0.250		1	0	NR	NR	NR	1
PFAS FEDERAL SITES	0.250		0	0	NR	NR	NR	0
PFAS TSCA	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
PFAS RCRA MANIFEST	0.250		0	0	NR	NR	NR	0
PFAS ATSDR	0.250		0	0	NR	NR	NR	0
PFAS WQP	0.250		0	0	NR	NR	NR	0
PFAS NPDES	0.250		0	0	NR	NR	NR	0
PFAS ECHO	0.250		0	0	NR	NR	NR	0
PFAS ECHO FIRE TRAINING	0.250		0	0	NR	NR	NR	0
PFAS PART 139 AIRPORT	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM NRC	0.250		0	0	NR	NR	NR	0
PFAS	0.250		0	0	NR	NR	NR	0
AQUEOUS FOAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	1	NR	NR	NR	1
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
ICE	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
MINES	0.250		0	0	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	1	0	NR	1
HAZMAT	0.250		0	0	NR	NR	NR	0
UIC	TP		NR	NR	NR	NR	NR	0
UIC GEO	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
MILITARY PRIV SITES	TP		NR	NR	NR	NR	NR	0
PROJECT	TP		NR	NR	NR	NR	NR	0
WDR	TP		NR	NR	NR	NR	NR	0
CIWQS	TP		NR	NR	NR	NR	NR	0
CERS	TP		NR	NR	NR	NR	NR	0
NON-CASE INFO	TP		NR	NR	NR	NR	NR	0
OTHER OIL GAS	TP		NR	NR	NR	NR	NR	0
PROD WATER PONDS	TP		NR	NR	NR	NR	NR	0
SAMPLING POINT	TP		NR	NR	NR	NR	NR	0
WELL STIM PROJ	TP		NR	NR	NR	NR	NR	0
HWTS	TP		NR	NR	NR	NR	NR	0
PFAS TRIS	0.250		0	0	NR	NR	NR	0
MINES MRDS	TP		NR	NR	NR	NR	NR	0

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP	1.000		0	0	0	0	NR	0
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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
<u>EDR RECOVERED GOVERNMENT ARCHIVES</u>								
<i>Exclusive Recovered Govt. Archives</i>								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	9	1	1	1	0	12

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

NPL
Region
< 1/8
1 ft.

FORT ORD
FORMER ARMY BASE FORT ORD
MARINA, CA 93933

NPL 1000393341
SEMS CA7210020676
CORRACTS
RCRA-TSDF
RCRA-LQG
US ENG CONTROLS
US INST CONTROLS
ROD
PRP
PFAS NPL

NPL:

EPA Region: 9
EPA ID: CA7210020676
Site ID: 902783
Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
Federal: Y
Final Date: 1990-02-21 00:00:00
Latitude: 36.625
Longitude: -121.75
Site Score: 42.240000000000002
NAI: Not reported
Native American Entity: Not reported

Substance as of 08/2019:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
CAS Number: Not reported
Substance: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: U210
CAS Number: 127-18-4
Substance: TETRACHLOROETHENE
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U211
CAS Number: 56-23-5
Substance: CARBON TETRACHLORIDE
Pathway: GROUND WATER PATHWAY
Scoring: 4

NPL Status: Currently on the Final NPL
Substance ID: U226
CAS Number: 71-55-6
Substance: TRICHLOROETHANE, 1,1,1-
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U228
CAS Number: 79-01-6
Substance: TRICHLOROETHYLENE (TCE)
Pathway: GROUND WATER PATHWAY

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

Scoring: 2

Summary Details:

Conditions at proposal July 14, 1989): Fort Ord covers 46 square miles on Monterey Bay approximately 5.6 miles north of Monterey, Monterey County, California. The installation is bordered by the City of Marina and the Salinas River to the north, El Toro Creek to the east, Seaside and Del Rey Oaks to the south, and Monterey Bay to the west. Fort Ord was established in 1917 as a maneuver area and field artillery target range for units then stationed at the Presidio of Monterey. Its primary mission now is training. Industrial operations at Fort Ord include vehicle maintenance areas, a battery charging/repair facility, photographic processing laboratories, spray painting operations, a plastics shop, laundry/dry cleaning facilities, vehicle wash racks, and a small arms repair shop. Chemicals and hazardous wastes were managed and disposed of at Fort Ord. According to tests conducted by the Army in 1986, elevated levels of contaminants were detected in off-base ground water. The contamination is emanating from the base and may be contaminating the drinking water supplies of the City of Marina; however, the exact location of the source has not yet been identified. The contaminants include carbon tetrachloride, tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, and trans-1,2-dichloroethylene. An estimated 38,600 people obtain drinking water from wells within 3 miles of hazardous substances on the fort. Ground water is also used for irrigation. In addition, soil and ground water are contaminated at the Fire Drill Area, where approximately 600 gallons of petroleum products have been spilled. Fort Ord has identified at least 18 other contamination problems. Fort Ord is participating in the Installation Restoration Program (IRP), established in 1978. Under this program, the Department of Defense seeks to identify, investigate, and clean up contamination from hazardous materials. As part of IRP, the Army is implementing a sampling plan to investigate ground water contamination. The Army is treating contaminated soil and ground water at nearby Fritsche Army Airfield Fire Drill Area. Status February 21, 1990): IRP activities continue.

Category as of 08/2019:

NPL Status: Currently on the Final NPL
 Category Description: Depth To Aquifer-> 50 And <= 100 Feet
 Category Value: 80

NPL Status: Currently on the Final NPL
 Category Description: Distance To Nearest Population-> 0 And <= 1/4 Mile
 Category Value: 10

Narratives as of 08/2019:

NPL Name: FORT ORD

Site as of 08/2019:

EPA Region: 09
 Site ID: 0902783
 Site Status: F
 Federal Site: Y
 Date Deleted: Not reported
 Date Finalized: 02/21/90
 Date Proposed: 07/14/89

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Status as of 08/2019:

Proposed Date: 07/14/1989
Final Date: 02/21/1990
Deleted Date: Not reported
NPL Status: Final

Narr:

Site Name: Fort Ord
Site EPA ID: CA7210020676
Listing Date: 2/21/1990
Site Score: 42.24
Federal Facility Indicator: Yes
Site List URL: <https://semspub.epa.gov/src/document/09/2400150>
Site Progress URL: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0902783>
Federal Register URL: <https://semspub.epa.gov/src/document/11/189635>
Site Location URL: https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=33cebcdfdd1b4c3a8b51d416956c41f1&query=Superfund_National_Priorities_List_NPL_Sites_with_Status_Information_7557,SITE_EPA_ID=%27CA7210020676%27

SEMS:

Site ID: 0902783
EPA ID: CA7210020676
Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
Cong District: 17,20
FIPS Code: 06053
Latitude: +36.625000
Longitude: -121.750000
FF: Y
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: NF
Action Name: NPL FINL
SEQ: 1
Start Date: 1990-02-21 05:00:00
Finish Date: 1990-02-21 05:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

FF: Y
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 2000-10-24 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: NP
Action Name: PROPOSED
SEQ: 1
Start Date: 1989-07-14 04:00:00
Finish Date: 1989-07-14 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: HR
Action Name: HAZRANK
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 1987-06-01 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TV
Action Name: Partial Del
SEQ: 1
Start Date: 2020-11-20 06:00:00
Finish Date: 2020-11-20 06:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: CR
Action Name: CI
SEQ: 1
Start Date: 2020-11-23 06:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: GR
Action Name: PART DEL
SEQ: 2
Start Date: 2021-05-14 04:00:00
Finish Date: 2021-05-14 04:00:00
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 7
Start Date: 1995-07-10 04:00:00
Finish Date: 1996-09-19 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: LX
Action Name: FF RD
SEQ: 2
Start Date: 1994-09-15 04:00:00
Finish Date: 1995-10-25 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TG
Action Name: TA GRANT
SEQ: 1
Start Date: 1996-10-01 04:00:00
Finish Date: 2002-08-16 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 01
Action Code: LX
Action Name: FF RD
SEQ: 4
Start Date: 1995-09-29 04:00:00
Finish Date: 1995-09-29 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: PA
Action Name: PA
SEQ: 1
Start Date: 1986-03-01 05:00:00
Finish Date: 1986-04-01 05:00:00
Qual: L
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 11
Start Date: 1998-05-08 04:00:00
Finish Date: 1998-05-08 04:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 12
Start Date: 1997-09-01 04:00:00
Finish Date: 2008-08-26 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LY
Action Name: FF RA
SEQ: 30
Start Date: 1998-05-05 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LX
Action Name: FF RD
SEQ: 13
Start Date: 2008-05-15 04:00:00
Finish Date: 2008-12-10 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 31
Start Date: 2008-12-10 05:00:00
Finish Date: 2011-09-08 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: LX
Action Name: FF RD
SEQ: 3
Start Date: 1994-09-15 04:00:00
Finish Date: 1996-03-07 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LV
Action Name: FF RV
SEQ: 10
Start Date: 1994-07-19 04:00:00
Finish Date: 1994-11-10 05:00:00
Qual: P
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TG
Action Name: TA GRANT
SEQ: 2
Start Date: 2003-08-15 04:00:00
Finish Date: 2010-01-14 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 03
Action Code: LX
Action Name: FF RD
SEQ: 8
Start Date: 1997-01-17 05:00:00
Finish Date: 1997-06-03 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 08
Action Code: RO
Action Name: ROD
SEQ: 9
Start Date: 2005-04-06 04:00:00
Finish Date: 2005-04-06 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LW
Action Name: FF RI/FS
SEQ: 9
Start Date: 2000-04-11 04:00:00
Finish Date: 2008-08-26 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LW
Action Name: FF RI/FS
SEQ: 10
Start Date: 2005-06-03 04:00:00
Finish Date: 2008-05-15 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: RO
Action Name: ROD
SEQ: 11
Start Date: 2008-05-15 04:00:00
Finish Date: 2008-05-15 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 35
Start Date: 1997-07-18 04:00:00
Finish Date: 2005-03-16 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 2
Start Date: 1995-06-19 04:00:00
Finish Date: 1996-03-07 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 9
Start Date: 1995-07-26 04:00:00
Finish Date: 1997-04-14 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 15
Start Date: 1996-07-01 04:00:00
Finish Date: 1997-01-31 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 1
Start Date: 1994-09-02 04:00:00
Finish Date: 1997-04-14 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LX
Action Name: FF RD
SEQ: 10
Start Date: 1997-02-01 05:00:00
Finish Date: 1997-03-05 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LX
Action Name: FF RD
SEQ: 11
Start Date: 1997-02-01 05:00:00
Finish Date: 1997-03-05 05:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LX
Action Name: FF RD
SEQ: 12
Start Date: 1997-02-01 05:00:00
Finish Date: 1997-03-05 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LY
Action Name: FF RA
SEQ: 23
Start Date: 1998-05-05 04:00:00
Finish Date: 2002-09-27 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LY
Action Name: FF RA
SEQ: 24
Start Date: 1997-03-03 05:00:00
Finish Date: 1999-09-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LY
Action Name: FF RA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 25
Start Date: 1997-03-06 05:00:00
Finish Date: 1999-09-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F

FF: Y
OU: 03
Action Code: LY
Action Name: FF RA
SEQ: 27
Start Date: 1999-04-01 05:00:00
Finish Date: 2014-10-09 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LY
Action Name: FF RA
SEQ: 26
Start Date: 1998-05-14 04:00:00
Finish Date: 1999-09-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 05
Action Code: LW
Action Name: FF RI/FS
SEQ: 1
Start Date: 1990-07-23 04:00:00
Finish Date: 1995-04-13 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 03
Action Code: LW
Action Name: FF RI/FS
SEQ: 6
Start Date: 1990-07-23 04:00:00
Finish Date: 1997-01-17 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LX
Action Name: FF RD
SEQ: 9
Start Date: 1997-02-01 05:00:00
Finish Date: 1997-03-05 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 08
Action Code: LW
Action Name: FF RI/FS
SEQ: 8
Start Date: 2000-04-11 04:00:00
Finish Date: 2005-04-06 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 07
Action Code: LW
Action Name: FF RI/FS
SEQ: 7
Start Date: 2000-04-11 04:00:00
Finish Date: 2002-07-02 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 07
Action Code: RO
Action Name: ROD
SEQ: 8
Start Date: 2002-07-02 04:00:00
Finish Date: 2002-07-02 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: LW
Action Name: FF RI/FS
SEQ: 2
Start Date: 1990-07-23 04:00:00
Finish Date: 1994-08-23 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 01
Action Code: LW
Action Name: FF RI/FS
SEQ: 3
Start Date: 1990-07-23 04:00:00
Finish Date: 1995-09-29 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 5
Start Date: 1995-06-26 04:00:00
Finish Date: 1998-04-06 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LX
Action Name: FF RD
SEQ: 1
Start Date: 1994-05-17 04:00:00
Finish Date: 1994-12-20 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 6
Start Date: 1995-07-05 04:00:00
Finish Date: 1997-07-28 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 06
Action Code: RO
Action Name: ROD
SEQ: 6
Start Date: 1997-01-17 05:00:00
Finish Date: 1997-01-17 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 13
Start Date: 2001-10-26 04:00:00
Finish Date: 2003-10-24 04:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 21
Start Date: 1997-04-27 04:00:00
Finish Date: 1998-03-18 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 20
Start Date: 1997-05-20 04:00:00
Finish Date: 1997-07-23 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LV
Action Name: FF RV
SEQ: 9
Start Date: 1994-07-13 04:00:00
Finish Date: 1994-10-24 04:00:00
Qual: P
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 19
Start Date: 1997-03-02 05:00:00
Finish Date: 1997-07-22 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 16

Start Date: 1995-04-11 04:00:00
Finish Date: 1997-01-31 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 22

Start Date: 1996-02-20 05:00:00
Finish Date: 1998-01-13 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 01
Action Code: RO
Action Name: ROD
SEQ: 4

Start Date: 1995-09-29 04:00:00
Finish Date: 1995-09-29 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 3
Start Date: 1995-06-21 04:00:00
Finish Date: 1996-09-19 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 8
Start Date: 1994-05-20 04:00:00
Finish Date: 2008-08-26 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 06
Action Code: LY
Action Name: FF RA
SEQ: 17
Start Date: 1997-05-31 04:00:00
Finish Date: 2000-09-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 10
Start Date: 1995-08-01 04:00:00
Finish Date: 1997-04-09 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 4
Start Date: 1995-06-26 04:00:00
Finish Date: 1997-04-14 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: LY
Action Name: FF RA
SEQ: 12
Start Date: 1994-08-23 04:00:00
Finish Date: 2002-09-27 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: LY
Action Name: FF RA
SEQ: 13
Start Date: 1997-05-17 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 32
Start Date: 1997-11-10 05:00:00
Finish Date: 2002-02-05 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 33
Start Date: 1995-06-01 04:00:00
Finish Date: 2002-02-05 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 14
Start Date: 2001-12-14 05:00:00
Finish Date: 2008-08-28 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 15
Start Date: 2002-01-23 05:00:00
Finish Date: 2008-05-15 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: SI
Action Name: SI
SEQ: 1
Start Date: 1987-06-01 04:00:00
Finish Date: 1987-06-01 04:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: H
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LY
Action Name: FF RA
SEQ: 8
Start Date: 1995-07-10 04:00:00
Finish Date: 1996-03-07 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: LW
Action Name: FF RI/FS
SEQ: 5
Start Date: 1993-11-04 05:00:00
Finish Date: 1994-03-15 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 01
Action Code: LY
Action Name: FF RA
SEQ: 11
Start Date: 1995-09-29 04:00:00
Finish Date: 2011-09-08 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LY
Action Name: FF RA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 37
Start Date: 2006-10-19 04:00:00
Finish Date: 2010-09-16 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 05
Action Code: RO
Action Name: ROD
SEQ: 3
Start Date: 1995-04-13 04:00:00
Finish Date: 1995-04-13 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 06
Action Code: LX
Action Name: FF RD
SEQ: 6
Start Date: 1997-02-01 05:00:00
Finish Date: 1997-06-09 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: LW
Action Name: FF RI/FS
SEQ: 4
Start Date: 1990-07-23 04:00:00
Finish Date: 1997-01-17 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 11
Action Code: LX
Action Name: FF RD
SEQ: 14
Start Date: 2008-02-06 05:00:00
Finish Date: 2008-08-01 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 11
Action Code: LY
Action Name: FF RA
SEQ: 36
Start Date: 2008-08-01 05:00:00
Finish Date: 2013-09-03 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LX
Action Name: FF RD
SEQ: 15
Start Date: 2006-07-01 04:00:00
Finish Date: 2006-08-08 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 04
Action Code: RO
Action Name: ROD
SEQ: 1
Start Date: 1994-03-15 05:00:00
Finish Date: 1994-03-15 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: RO
Action Name: ROD
SEQ: 2
Start Date: 1994-08-23 04:00:00
Finish Date: 1994-08-23 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: LZ
Action Name: FF CR
SEQ: 1
Start Date: 1998-03-18 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: RO
Action Name: ROD
SEQ: 5
Start Date: 1997-01-17 05:00:00
Finish Date: 1997-01-17 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: DS
Action Name: DISCVRY
SEQ: 1
Start Date: 1980-11-01 05:00:00
Finish Date: 1980-11-01 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: RO
Action Name: ROD
SEQ: 13
Start Date: 2002-09-20 04:00:00
Finish Date: 2002-09-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LW
Action Name: FF RI/FS
SEQ: 11
Start Date: 2000-04-11 04:00:00
Finish Date: 2002-09-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 11
Action Code: LW
Action Name: FF RI/FS
SEQ: 12
Start Date: 2002-07-29 04:00:00
Finish Date: 2006-05-01 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 11
Action Code: RO
Action Name: ROD
SEQ: 14
Start Date: 2008-02-06 05:00:00
Finish Date: 2008-02-06 05:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 16
Start Date: 2003-12-01 05:00:00
Finish Date: 2003-12-01 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LY
Action Name: FF RA
SEQ: 34
Start Date: 2003-10-24 04:00:00
Finish Date: 2007-02-12 05:00:00
Qual: IR
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LV
Action Name: FF RV
SEQ: 17
Start Date: 2004-02-06 05:00:00
Finish Date: 2004-05-04 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 03
Action Code: OM
Action Name: OM

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 3
Start Date: 2002-09-27 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 02
Action Code: OM
Action Name: OM
SEQ: 1

Start Date: 2002-09-27 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 01
Action Code: OM
Action Name: OM
SEQ: 2

Start Date: 2011-09-08 04:00:00
Finish Date: 2017-02-21 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: RO
Action Name: ROD
SEQ: 17

Start Date: 2018-09-21 05:00:00
Finish Date: 2018-09-21 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 09
Action Code: RO
Action Name: ROD
SEQ: 15
Start Date: 2008-11-21 05:00:00
Finish Date: 2008-11-21 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LW
Action Name: FF RI/FS
SEQ: 13
Start Date: 2007-03-27 04:00:00
Finish Date: 2008-11-21 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LX
Action Name: FF RD
SEQ: 17
Start Date: 2009-02-27 05:00:00
Finish Date: 2009-07-09 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: RO
Action Name: ROD
SEQ: 19
Start Date: 2009-04-30 04:00:00
Finish Date: 2014-11-25 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: RO
Action Name: ROD
SEQ: 20
Start Date: 2017-10-31 04:00:00
Finish Date: 2018-09-21 05:00:00
Qual: R
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LX
Action Name: FF RD
SEQ: 18
Start Date: 2010-04-28 04:00:00
Finish Date: 2010-08-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LY
Action Name: FF RA
SEQ: 39
Start Date: 2010-04-28 04:00:00
Finish Date: 2010-08-20 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: RO
Action Name: ROD
SEQ: 16
Start Date: 2008-08-26 05:00:00
Finish Date: 2008-08-26 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LY
Action Name: FF RA
SEQ: 38
Start Date: 2008-11-25 05:00:00
Finish Date: 2009-07-27 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: RO
Action Name: ROD
SEQ: 18
Start Date: 2008-08-01 05:00:00
Finish Date: 2015-02-26 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LX
Action Name: FF RD
SEQ: 16
Start Date: 2008-11-25 05:00:00
Finish Date: 2009-07-27 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TG
Action Name: TA GRANT
SEQ: 3
Start Date: 2007-11-01 04:00:00
Finish Date: 2007-12-21 05:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TG
Action Name: TA GRANT
SEQ: 4
Start Date: 2010-07-01 05:00:00
Finish Date: 2012-06-25 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 44
Start Date: 2009-10-06 04:00:00
Finish Date: 2012-08-15 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LX
Action Name: FF RD
SEQ: 19
Start Date: 2010-02-11 05:00:00
Finish Date: 2010-07-31 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 45
Start Date: 2010-10-07 04:00:00
Finish Date: 2013-09-05 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F

FF: Y
OU: 00
Action Code: TG
Action Name: TA GRANT
SEQ: 5
Start Date: 2013-02-19 05:00:00
Finish Date: 2016-06-30 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: RO
Action Name: ROD
SEQ: 21
Start Date: 2017-01-18 05:00:00
Finish Date: 2017-01-18 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 47
Start Date: 2011-10-06 04:00:00
Finish Date: 2014-09-17 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 48
Start Date: 2013-03-04 05:00:00
Finish Date: 2015-09-01 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TA
Action Name: TECH ASSIST
SEQ: 2
Start Date: 2013-02-19 05:00:00
Finish Date: 2016-06-30 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TA
Action Name: TECH ASSIST
SEQ: 1
Start Date: 2013-03-20 04:00:00
Finish Date: 2016-06-30 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TA
Action Name: TECH ASSIST
SEQ: 3
Start Date: 2013-03-20 04:00:00
Finish Date: 2016-06-30 04:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 00
Action Code: TA
Action Name: TECH ASSIST
SEQ: 5
Start Date: 2017-10-03 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LW
Action Name: FF RI/FS
SEQ: 19
Start Date: 2013-04-23 04:00:00
Finish Date: 2017-03-29 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: RO
Action Name: ROD
SEQ: 22
Start Date: 2017-03-29 05:00:00
Finish Date: 2017-03-29 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 49
Start Date: 2013-06-01 05:00:00
Finish Date: 2015-09-01 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Map ID
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Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: LY
Action Name: FF RA
SEQ: 51
Start Date: 2003-10-24 04:00:00
Finish Date: 2015-02-03 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 52
Start Date: 2013-10-15 05:00:00
Finish Date: 2015-09-01 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 53
Start Date: 2013-10-15 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 10
Action Code: LY
Action Name: FF RA
SEQ: 54
Start Date: 2013-03-04 05:00:00
Finish Date: 2015-09-01 05:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 09
Action Code: RO
Action Name: ROD
SEQ: 23
Start Date: 2015-09-03 05:00:00
Finish Date: 2015-09-03 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 01
Action Code: LY
Action Name: FF RA
SEQ: 55
Start Date: 2010-07-14 05:00:00
Finish Date: 2016-03-28 05:00:00
Qual: Not reported
Current Action Lead: Fed Fac

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LW
Action Name: FF RI/FS
SEQ: 17
Start Date: 2017-10-31 04:00:00
Finish Date: 2018-09-21 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LW
Action Name: FF RI/FS

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ: 15
Start Date: 2008-08-01 05:00:00
Finish Date: 2015-02-26 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LW
Action Name: FF RI/FS
SEQ: 16

Start Date: 2009-02-27 05:00:00
Finish Date: 2014-11-25 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LW
Action Name: FF RI/FS
SEQ: 14

Start Date: 2008-05-24 04:00:00
Finish Date: 2015-09-21 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LY
Action Name: FF RA
SEQ: 40

Start Date: 2018-09-30 05:00:00
Finish Date: 2019-02-28 06:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

OU: 12
Action Code: LY
Action Name: FF RA
SEQ: 41
Start Date: 2015-02-26 05:00:00
Finish Date: 2018-09-27 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LY
Action Name: FF RA
SEQ: 42
Start Date: 2014-11-25 05:00:00
Finish Date: 2018-09-27 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LY
Action Name: FF RA
SEQ: 43
Start Date: 2018-09-30 05:00:00
Finish Date: 2019-02-28 06:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676
Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LW
Action Name: FF RI/FS
SEQ: 18
Start Date: 2013-07-18 04:00:00
Finish Date: 2017-01-18 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

Region: 09
Site ID: 0902783
EPA ID: CA7210020676

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site Name: FORT ORD
NPL: F
FF: Y
OU: 12
Action Code: LY
Action Name: FF RA
SEQ: 46
Start Date: 2017-01-18 05:00:00
Finish Date: 2018-09-27 05:00:00
Qual: Not reported
Current Action Lead: Prosp Purch

CORRACTS:

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: ENTIRE FACILITY
Corrective Action: INVESTIGATION WORKPLAN APPROVED
Actual Date: 19911201
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: BASEWIDE RI SITES
Corrective Action: INVESTIGATION COMPLETE
Actual Date: 19970113
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: ENTIRE FACILITY
Corrective Action: CMS WORKPLAN APPROVED
Actual Date: 19911201
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: BASEWIDE RI SITES
Corrective Action: CMS COMPLETE
Actual Date: 19970113

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: ENTIRE FACILITY
Corrective Action: HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Actual Date: 20000522
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: ENTIRE FACILITY
Corrective Action: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Actual Date: 20000522
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

Name: ORD MILITARY COMMUNITY
Address: 4495 JOE LLOYD WAY
Address 2: ORD MILITARY COMMUNITY
EPA ID: CA7210020676
Area Name: ENTIRE FACILITY
Corrective Action: REMEDY DECISION

Actual Date: 19970113
Air Release Indicator: Not reported
Groundwater Release Indicator: Not reported
Soil Release Indicator: Not reported
Surface Water Release Indicator: Not reported

RCRA TSD:

Treatment Storage and Disposal Type: Storage, Treatment
Full Enforcement Universe: Not reported
Corrective Action Workload Universe: Yes
Permit Renewals Workload Universe: Not reported
Permit Workload Universe: Not reported
Permit Progress Universe: Storage, Treatment
Post-Closure Workload Universe: Not reported
Closure Workload Universe: Not reported
Operating TSD Universe: Not reported
Commercial TSD Indicator: No
Active Site Fed-Reg Treatment Storage and Disposal Facility: Not reported
Active Site Converter Treatment storage and Disposal Facility: Not reported
Active Site State-Reg Treatment Storage and Disposal Facility: Not reported

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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

TSDFs Potentially Subject to CA Under 3004 (u)/(v) Universe: No
 TSDFs Only Subject to CA under Discretionary Auth Universe: No

Biennial: List of Years

Year: 2021

Click Here for Biennial Reporting System Data:

Year: 2009

Click Here for Biennial Reporting System Data:

Year: 2005

Click Here for Biennial Reporting System Data:

Year: 2003

Click Here for Biennial Reporting System Data:

Year: 2001

Click Here for Biennial Reporting System Data:

RCRA Listings:

Date Form Received by Agency:	20220610
Handler Name:	Ord Military Community
Handler Address:	4495 JOE LLOYD WAY
Handler City,State,Zip:	SEASIDE, CA 93955
EPA ID:	CA7210020676
Contact Name:	AVA D CARTER
Contact Address:	P.O. BOX 5005 ATTN: IMPM-PW-AMIM-E
Contact City,State,Zip:	MONTEREY, CA 93944-5004
Contact Telephone:	831-887-8878
Contact Fax:	Not reported
Contact Email:	AVA.D.CARTER.CIV@ARMY.MIL
Contact Title:	ENVIRONMENTAL PROTECTION SPECIALIST
EPA Region:	09
Land Type:	Federal
Federal Waste Generator Description:	Large Quantity Generator
Non-Notifier:	Not reported
Biennial Report Cycle:	2021
Accessibility:	Not reported
Active Site Indicator:	Handler Activities, Corrective Action Activities
State District Owner:	Not reported
State District:	Not reported
Mailing Address:	PO BOX 5004 ATTN: IMPM-PW-AMIM-E
Mailing City,State,Zip:	MONTEREY, CA 93944-5004
Owner Name:	U.S. Army
Owner Type:	Federal
Operator Name:	Varman S. Chheoung
Operator Type:	Federal
Short-Term Generator Activity:	No
Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility Activity:	No
Recycler Activity with Storage:	No
Small Quantity On-Site Burner Exemption:	No
Smelting Melting and Refining Furnace Exemption:	No

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Underground Injection Control:	No
Off-Site Waste Receipt:	No
Universal Waste Indicator:	Yes
Universal Waste Destination Facility:	Yes
Federal Universal Waste:	Yes
Active Site State-Reg Handler:	---
Federal Facility Indicator:	The land is federally-owned, The site is federally-owned, The site is federally-operated
Hazardous Secondary Material Indicator:	N
Sub-Part K Indicator:	Not reported
2018 GPRC Permit Baseline:	Not on the Baseline
2018 GPRC Renewals Baseline:	Not on the Baseline
202 GPRC Corrective Action Baseline:	No
Subject to Corrective Action Universe:	No
Non-TSDFs Where RCRA CA has Been Imposed Universe:	Yes
Corrective Action Priority Ranking:	No NCAPS ranking
Environmental Control Indicator:	No
Institutional Control Indicator:	No
Human Exposure Controls Indicator:	No
Groundwater Controls Indicator:	No
Significant Non-Complier Universe:	No
Unaddressed Significant Non-Complier Universe:	No
Addressed Significant Non-Complier Universe:	No
Significant Non-Complier With a Compliance Schedule Universe:	No
Financial Assurance Required:	Not reported
Handler Date of Last Change:	20220627
Recognized Trader-Importer:	No
Recognized Trader-Exporter:	No
Importer of Spent Lead Acid Batteries:	No
Exporter of Spent Lead Acid Batteries:	No
Recycler Activity Without Storage:	No
Manifest Broker:	No
Sub-Part P Indicator:	No

Biennial: List of Years

Year: 2021

[Click Here for Biennial Reporting System Data:](#)

Year: 2009

[Click Here for Biennial Reporting System Data:](#)

Year: 2005

[Click Here for Biennial Reporting System Data:](#)

Year: 2003

[Click Here for Biennial Reporting System Data:](#)

Year: 2001

[Click Here for Biennial Reporting System Data:](#)

Hazardous Waste Summary:

Waste Code: D001
Waste Description: IGNITABLE WASTE

Waste Code: D002

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MAP FINDINGS

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Database(s)

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FORT ORD (Continued)

1000393341

Waste Description:	CORROSIVE WASTE
Waste Code:	D003
Waste Description:	REACTIVE WASTE
Waste Code:	D004
Waste Description:	ARSENIC
Waste Code:	D006
Waste Description:	CADMIUM
Waste Code:	D007
Waste Description:	CHROMIUM
Waste Code:	D008
Waste Description:	LEAD
Waste Code:	D009
Waste Description:	MERCURY
Waste Code:	D011
Waste Description:	SILVER
Waste Code:	D018
Waste Description:	BENZENE
Waste Code:	D022
Waste Description:	CHLOROFORM
Waste Code:	D023
Waste Description:	O-CRESOL
Waste Code:	D035
Waste Description:	METHYL ETHYL KETONE
Waste Code:	D039
Waste Description:	TETRACHLOROETHYLENE
Waste Code:	F002
Waste Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Waste Code:	P098
Waste Description:	POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
Waste Code:	U002
Waste Description:	2-PROPANONE (I) (OR) ACETONE (I)
Waste Code:	U069
Waste Description:	1,2-BENZENEDICARBOXYLIC ACID, DIBUTYL ESTER (OR) DIBUTYL PHTHALATE

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Waste Code: U151
Waste Description: MERCURY

Waste Code: U162
Waste Description: 2-PROPENOIC ACID, 2-METHYL-, METHYL ESTER (I,T) (OR) METHYL METHACRYLATE (I,T)

Handler - Owner Operator:

Owner/Operator Indicator: Operator
Owner/Operator Name: JEFFREY S. CAIRNS, COL., US
Legal Status: Federal
Date Became Current: 20030709
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: U.S. ARMY
Legal Status: Federal
Date Became Current: 19170111
Date Ended Current: Not reported
Owner/Operator Address: P.O. BOX 5005
Owner/Operator City,State,Zip: MONTEREY, CA 93944
Owner/Operator Telephone: 831-242-7924
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Operator
Owner/Operator Name: DARCY A BREWER, COL., US
Legal Status: Federal
Date Became Current: 20080707
Date Ended Current: Not reported
Owner/Operator Address: Not reported
Owner/Operator City,State,Zip: Not reported
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner
Owner/Operator Name: U.S. ARMY
Legal Status: Federal
Date Became Current: 19170111
Date Ended Current: Not reported
Owner/Operator Address: P.O. BOX 5005
Owner/Operator City,State,Zip: MONTEREY, CA 93944
Owner/Operator Telephone: Not reported
Owner/Operator Telephone Ext: Not reported
Owner/Operator Fax: Not reported
Owner/Operator Email: Not reported

Owner/Operator Indicator: Owner

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Owner/Operator Name:	U.S. ARMY	
Legal Status:	Federal	
Date Became Current:	19170111	
Date Ended Current:	Not reported	
Owner/Operator Address:	P.O. BOX 5005	
Owner/Operator City,State,Zip:	MONTEREY, CA 93944	
Owner/Operator Telephone:	Not reported	
Owner/Operator Telephone Ext:	Not reported	
Owner/Operator Fax:	Not reported	
Owner/Operator Email:	Not reported	
Owner/Operator Indicator:	Owner	
Owner/Operator Name:	US ARMY	
Legal Status:	Federal	
Date Became Current:	Not reported	
Date Ended Current:	Not reported	
Owner/Operator Address:	DIR FAC ENGRG ATTN AFZW-FE-E	
Owner/Operator City,State,Zip:	FORT ORD, CA 93941	
Owner/Operator Telephone:	408-242-4505	
Owner/Operator Telephone Ext:	Not reported	
Owner/Operator Fax:	Not reported	
Owner/Operator Email:	Not reported	
Owner/Operator Indicator:	Operator	
Owner/Operator Name:	VARMAN S. CHHEOUNG	
Legal Status:	Federal	
Date Became Current:	20180706	
Date Ended Current:	Not reported	
Owner/Operator Address:	P.O. BOX 5004 ATTN: IMPM-PW CHIEF, DPW	
Owner/Operator City,State,Zip:	MONTEREY, CA 93944-5004	
Owner/Operator Telephone:	831-242-7924	
Owner/Operator Telephone Ext:	Not reported	
Owner/Operator Fax:	Not reported	
Owner/Operator Email:	VARMAN.S.CHHEOUNG.MIL@ARMY.MIL	
Owner/Operator Indicator:	Operator	
Owner/Operator Name:	JEFFREY S. CAIRNS, COL., US ARMY	
Legal Status:	Federal	
Date Became Current:	20030709	
Date Ended Current:	Not reported	
Owner/Operator Address:	Not reported	
Owner/Operator City,State,Zip:	Not reported	
Owner/Operator Telephone:	Not reported	
Owner/Operator Telephone Ext:	Not reported	
Owner/Operator Fax:	Not reported	
Owner/Operator Email:	Not reported	
Owner/Operator Indicator:	Owner	
Owner/Operator Name:	U.S. ARMY	
Legal Status:	Federal	
Date Became Current:	19170111	
Date Ended Current:	Not reported	
Owner/Operator Address:	P.O. BOX 5005	
Owner/Operator City,State,Zip:	MONTEREY, CA 93944	
Owner/Operator Telephone:	831-242-7924	
Owner/Operator Telephone Ext:	Not reported	
Owner/Operator Fax:	Not reported	

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Owner/Operator Email: VARMAN.S.CHHEOUNG.MIL@ARMY.MIL

Historic Generators:

Receive Date: 20100617
Handler Name: ORD MILITARY COMMUNITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20220610
Handler Name: ORD MILITARY COMMUNITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: Yes
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: Yes
Non Storage Recycler Activity: No
Electronic Manifest Broker: No

Receive Date: 19800814
Handler Name: USARMY FORT ORD
Federal Waste Generator Description: Large Quantity Generator
State District Owner: CA
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19900413
Handler Name: FORT ORD, US ARMY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19920229
Handler Name: FORT ORD, US ARMY BASE

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19960301
Handler Name: DEF LANGUAGE INST & PRESIDIO OF MONTEREY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 19990304
Handler Name: HQ, DEFENSE LANGUAGE INST., POM ANNEX
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20001012
Handler Name: HQ, DLI, POM ANNEX
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20020204
Handler Name: ORD MILITARY COMMUNITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No

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FORT ORD (Continued)

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Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20040218
Handler Name: ORD MILITARY COMMUNITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

Receive Date: 20060218
Handler Name: ORD MILITARY COMMUNITY
Federal Waste Generator Description: Large Quantity Generator
State District Owner: Not reported
Large Quantity Handler of Universal Waste: No
Recognized Trader Importer: No
Recognized Trader Exporter: No
Spent Lead Acid Battery Importer: No
Spent Lead Acid Battery Exporter: No
Current Record: No
Non Storage Recycler Activity: Not reported
Electronic Manifest Broker: Not reported

List of NAICS Codes and Descriptions:

NAICS Code: 56121
NAICS Description: FACILITIES SUPPORT SERVICES

NAICS Code: 61163
NAICS Description: LANGUAGE SCHOOLS

NAICS Code: 92119
NAICS Description: OTHER GENERAL GOVERNMENT SUPPORT

NAICS Code: 92811
NAICS Description: NATIONAL SECURITY

Has the Facility Received Notices of Violations:

Found Violation: Yes
Agency Which Determined Violation: State
Violation Short Description: Generators - General
Date Violation was Determined: 19920401
Actual Return to Compliance Date: 19920624
Return to Compliance Qualifier: Observed
Violation Responsible Agency: State
Scheduled Compliance Date: Not reported
Enforcement Identifier: Not reported
Date of Enforcement Action: Not reported

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FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation
Date Violation was Determined:	20190529
Actual Return to Compliance Date:	20190530
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	500
Date of Enforcement Action:	20191114
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19930921
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19920624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19920618
Enforcement Identifier:	004
Date of Enforcement Action:	19920410

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FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19870420
Actual Return to Compliance Date:	19891219
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	003
Date of Enforcement Action:	19900308
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19930624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19920624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

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FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19880105
Actual Return to Compliance Date:	19890411
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	002
Date of Enforcement Action:	19880318
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19920624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19920618
Enforcement Identifier:	004
Date of Enforcement Action:	19920410
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	19870407
Actual Return to Compliance Date:	19870420
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

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Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19930624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19920618
Enforcement Identifier:	004
Date of Enforcement Action:	19920410
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19920624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19920624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19920618
Enforcement Identifier:	004
Date of Enforcement Action:	19920410

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FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19870407
Actual Return to Compliance Date:	19870420
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	LDR - General
Date Violation was Determined:	19870407
Actual Return to Compliance Date:	19870420
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

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1000393341

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19930624
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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Database(s)

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 EPA ID Number

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1000393341

SEP Defaulted Date: Not reported
 SEP Type: Not reported
 SEP Type Description: Not reported
 Proposed Amount: Not reported
 Final Monetary Amount: Not reported
 Paid Amount: Not reported
 Final Count: Not reported
 Final Amount: Not reported

Found Violation: No
 Agency Which Determined Violation: Not reported
 Violation Short Description: Not reported
 Date Violation was Determined: Not reported
 Actual Return to Compliance Date: Not reported
 Return to Compliance Qualifier: Not reported
 Violation Responsible Agency: Not reported
 Scheduled Compliance Date: Not reported
 Enforcement Identifier: Not reported
 Date of Enforcement Action: Not reported
 Enforcement Responsible Agency: Not reported
 Enforcement Docket Number: Not reported
 Enforcement Attorney: Not reported
 Corrective Action Component: Not reported
 Appeal Initiated Date: Not reported
 Appeal Resolution Date: Not reported
 Disposition Status Date: Not reported
 Disposition Status: Not reported
 Disposition Status Description: Not reported
 Consent/Final Order Sequence Number: Not reported
 Consent/Final Order Respondent Name: Not reported
 Consent/Final Order Lead Agency: Not reported
 Enforcement Type: Not reported
 Enforcement Responsible Person: Not reported
 Enforcement Responsible Sub-Organization: Not reported
 SEP Sequence Number: Not reported
 SEP Expenditure Amount: Not reported
 SEP Scheduled Completion Date: Not reported
 SEP Actual Date: Not reported
 SEP Defaulted Date: Not reported
 SEP Type: Not reported
 SEP Type Description: Not reported
 Proposed Amount: Not reported
 Final Monetary Amount: Not reported
 Paid Amount: Not reported
 Final Count: Not reported
 Final Amount: Not reported

Found Violation: Yes
 Agency Which Determined Violation: EPA
 Violation Short Description: TSD - General
 Date Violation was Determined: 19890411
 Actual Return to Compliance Date: 19891219
 Return to Compliance Qualifier: Unverifiable
 Violation Responsible Agency: State
 Scheduled Compliance Date: 19890710
 Enforcement Identifier: 004
 Date of Enforcement Action: 19890609

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

Map ID
Direction
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	19950413
Actual Return to Compliance Date:	19950511
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19950826
Enforcement Identifier:	008
Date of Enforcement Action:	19950413
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation
Date Violation was Determined:	20190529
Actual Return to Compliance Date:	20190530
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	300
Date of Enforcement Action:	20210212
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	SINGLE SITE CA/FO
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	4000
Paid Amount:	Not reported
Final Count:	1
Final Amount:	4000
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19920401
Actual Return to Compliance Date:	19930921
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19920618
Enforcement Identifier:	004
Date of Enforcement Action:	19920410
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19971202
Actual Return to Compliance Date:	19971202
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	009
Date of Enforcement Action:	19971202

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19930625
Actual Return to Compliance Date:	19930921
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19931104
Enforcement Identifier:	006
Date of Enforcement Action:	19930805
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19870420
Actual Return to Compliance Date:	19891219
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	19871022
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - Closure/Post-Closure
Date Violation was Determined:	19950413
Actual Return to Compliance Date:	19950511
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19950826
Enforcement Identifier:	008
Date of Enforcement Action:	19950413

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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19930625
Actual Return to Compliance Date:	19930921
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19931104
Enforcement Identifier:	006
Date of Enforcement Action:	19930805
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19890411
Actual Return to Compliance Date:	19891219
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	19890710
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19870407
Actual Return to Compliance Date:	19870420
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	001
Date of Enforcement Action:	19870930
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	EPA TO STATE ADMINISTRATIVE REFERRAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19950413
Actual Return to Compliance Date:	19950511
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19950826
Enforcement Identifier:	008
Date of Enforcement Action:	19950413
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19880105
Actual Return to Compliance Date:	19890411
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	State Statute or Regulation
Date Violation was Determined:	20190529
Actual Return to Compliance Date:	20190530
Return to Compliance Qualifier:	Documented
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	300
Date of Enforcement Action:	20190530
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

Map ID
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MAP FINDINGS

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Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	No
Agency Which Determined Violation:	Not reported
Violation Short Description:	Not reported
Date Violation was Determined:	Not reported
Actual Return to Compliance Date:	Not reported
Return to Compliance Qualifier:	Not reported
Violation Responsible Agency:	Not reported
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported
Enforcement Responsible Agency:	Not reported
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	Not reported
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	Not reported
Enforcement Responsible Person:	Not reported
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	LDR - General
Date Violation was Determined:	19930805
Actual Return to Compliance Date:	19930921
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19931104
Enforcement Identifier:	006
Date of Enforcement Action:	19930805

Map ID
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MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	EPA
Violation Short Description:	TSD - General
Date Violation was Determined:	19910319
Actual Return to Compliance Date:	19920204
Return to Compliance Qualifier:	Unverifiable
Violation Responsible Agency:	EPA
Scheduled Compliance Date:	19910721
Enforcement Identifier:	005
Date of Enforcement Action:	19910621
Enforcement Responsible Agency:	EPA
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9EPA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported

Map ID
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MAP FINDINGS

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Database(s)

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 EPA ID Number

FORT ORD (Continued)

1000393341

SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	Generators - General
Date Violation was Determined:	19950413
Actual Return to Compliance Date:	19950511
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	19950826
Enforcement Identifier:	008
Date of Enforcement Action:	19950413
Enforcement Responsible Agency:	State
Enforcement Docket Number:	Not reported
Enforcement Attorney:	Not reported
Corrective Action Component:	No
Appeal Initiated Date:	Not reported
Appeal Resolution Date:	Not reported
Disposition Status Date:	Not reported
Disposition Status:	Not reported
Disposition Status Description:	Not reported
Consent/Final Order Sequence Number:	Not reported
Consent/Final Order Respondent Name:	Not reported
Consent/Final Order Lead Agency:	Not reported
Enforcement Type:	WRITTEN INFORMAL
Enforcement Responsible Person:	R9STA
Enforcement Responsible Sub-Organization:	Not reported
SEP Sequence Number:	Not reported
SEP Expenditure Amount:	Not reported
SEP Scheduled Completion Date:	Not reported
SEP Actual Date:	Not reported
SEP Defaulted Date:	Not reported
SEP Type:	Not reported
SEP Type Description:	Not reported
Proposed Amount:	Not reported
Final Monetary Amount:	Not reported
Paid Amount:	Not reported
Final Count:	Not reported
Final Amount:	Not reported
Found Violation:	Yes
Agency Which Determined Violation:	State
Violation Short Description:	TSD - General
Date Violation was Determined:	19870420
Actual Return to Compliance Date:	19891219
Return to Compliance Qualifier:	Observed
Violation Responsible Agency:	State
Scheduled Compliance Date:	Not reported
Enforcement Identifier:	Not reported
Date of Enforcement Action:	Not reported

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Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Enforcement Responsible Agency: Not reported
Enforcement Docket Number: Not reported
Enforcement Attorney: Not reported
Corrective Action Component: Not reported
Appeal Initiated Date: Not reported
Appeal Resolution Date: Not reported
Disposition Status Date: Not reported
Disposition Status: Not reported
Disposition Status Description: Not reported
Consent/Final Order Sequence Number: Not reported
Consent/Final Order Respondent Name: Not reported
Consent/Final Order Lead Agency: Not reported
Enforcement Type: Not reported
Enforcement Responsible Person: Not reported
Enforcement Responsible Sub-Organization: Not reported
SEP Sequence Number: Not reported
SEP Expenditure Amount: Not reported
SEP Scheduled Completion Date: Not reported
SEP Actual Date: Not reported
SEP Defaulted Date: Not reported
SEP Type: Not reported
SEP Type Description: Not reported
Proposed Amount: Not reported
Final Monetary Amount: Not reported
Paid Amount: Not reported
Final Count: Not reported
Final Amount: Not reported

Evaluation Action Summary:

Evaluation Date: 19920204
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19920624
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 20190529
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: FACILITY SELF DISCLOSURE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 20190530
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19920204
Evaluation Responsible Agency: State

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FORT ORD (Continued)

1000393341

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930921
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920624
Scheduled Compliance Date:	19920618
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870420
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891219
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930624
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920624

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FORT ORD (Continued)

1000393341

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19880105
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19890411
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920624
Scheduled Compliance Date:	19920618
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870407
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870420
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930624
Scheduled Compliance Date:	19920618
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

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FORT ORD (Continued)

1000393341

Evaluation Date: 19920204
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19920624
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19920204
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19920624
Scheduled Compliance Date: 19920618
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 20190530
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: NOT A SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19870407
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19870420
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19870407
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA

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EPA ID Number

FORT ORD (Continued)

1000393341

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870420
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930624
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19960523
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19890411
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891219
Scheduled Compliance Date:	19890710
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20190529
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	SIGNIFICANT NON-COMPLIER
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported

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EPA ID Number

FORT ORD (Continued)

1000393341

Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950411
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950511
Scheduled Compliance Date:	19950826
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19970122
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	20190529
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	FACILITY SELF DISCLOSURE
Evaluation Responsible Person Identifier:	Not reported
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	20190530
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19920204
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930921
Scheduled Compliance Date:	19920618
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19971202
Evaluation Responsible Agency:	State

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EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19971202
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19930622
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930921
Scheduled Compliance Date:	19931104
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870420
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891219
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950411
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950511
Scheduled Compliance Date:	19950826
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950927
Evaluation Responsible Agency:	State
Found Violation:	No
Evaluation Type Description:	FOCUSED COMPLIANCE INSPECTION
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	Not reported

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FORT ORD (Continued)

1000393341

Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19930622
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19930921
Scheduled Compliance Date:	19931104
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19890411
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891219
Scheduled Compliance Date:	19890710
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870407
Evaluation Responsible Agency:	EPA
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9EPA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19870420
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950411
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950511
Scheduled Compliance Date:	19950826
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

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FORT ORD (Continued)

1000393341

Evaluation Date: 19880105
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19890411
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 20190529
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: FACILITY SELF DISCLOSURE
Evaluation Responsible Person Identifier: Not reported
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 20190530
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19891219
Evaluation Responsible Agency: State
Found Violation: No
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: Not reported
Scheduled Compliance Date: Not reported
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19930622
Evaluation Responsible Agency: State
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9STA
Evaluation Responsible Sub-Organization: Not reported
Actual Return to Compliance Date: 19930921
Scheduled Compliance Date: 19931104
Date of Request: Not reported
Date Response Received: Not reported
Request Agency: Not reported
Former Citation: Not reported

Evaluation Date: 19910319
Evaluation Responsible Agency: EPA
Found Violation: Yes
Evaluation Type Description: COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier: R9EPA

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FORT ORD (Continued)

1000393341

Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19920204
Scheduled Compliance Date:	19910721
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19950411
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19950511
Scheduled Compliance Date:	19950826
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported
Evaluation Date:	19870420
Evaluation Responsible Agency:	State
Found Violation:	Yes
Evaluation Type Description:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Evaluation Responsible Person Identifier:	R9STA
Evaluation Responsible Sub-Organization:	Not reported
Actual Return to Compliance Date:	19891219
Scheduled Compliance Date:	Not reported
Date of Request:	Not reported
Date Response Received:	Not reported
Request Agency:	Not reported
Former Citation:	Not reported

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FORT ORD (Continued)

1000393341

Site:

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
Event Code: Not reported
Action Taken Date: 05/21/2018
EPA ID: CA7210020676
Action Name: Explanation of Significant Differences
Action ID: 7
Operable Unit: 09
Contaminated Media: Solid Waste
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2018
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Media:

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 11
Operable Unit: 10
Action Name: Record of Decision
Action Taken Date: 05/15/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

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Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

EPA ID:	CA7210020676
Contaminated Media:	Solid Waste
Action ID:	13
Operable Unit:	09
Action Name:	Record of Decision
Action Taken Date:	09/20/2002
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2002
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Solid Waste
Action ID:	13
Operable Unit:	09
Action Name:	Record of Decision
Action Taken Date:	09/20/2002
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2002
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Debris
Action ID:	4
Operable Unit:	07
Action Name:	Explanation of Significant Differences
Action Taken Date:	04/26/2005
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2005
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Soil
Action ID:	4
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/29/1995

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1995
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Sediment
Action ID:	5
Operable Unit:	03
Action Name:	Record of Decision
Action Taken Date:	01/17/1997
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1997
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Not reported
Action ID:	2
Operable Unit:	02
Action Name:	Explanation of Significant Differences
Action Taken Date:	01/17/1997
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1997
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Soil
Action ID:	3
Operable Unit:	03
Action Name:	Explanation of Significant Differences
Action Taken Date:	12/01/2003
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2004

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 6
Operable Unit: 06
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Contaminated Media: Groundwater
Action ID: 1
Operable Unit: 02
Action Name: Explanation of Significant Differences
Action Taken Date: 08/23/1995
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1995
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 3
Operable Unit: 03
Action Name: Explanation of Significant Differences
Action Taken Date: 12/01/2003
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2004
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Landfill Gas
Action ID: 5
Operable Unit: 02
Action Name: Explanation of Significant Differences
Action Taken Date: 10/04/2006
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2007
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 6
Operable Unit: 06
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1997
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Solid Waste
Action ID:	8
Operable Unit:	07
Action Name:	Record of Decision
Action Taken Date:	07/02/2002
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2002
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Soil
Action ID:	9
Operable Unit:	08
Action Name:	Record of Decision
Action Taken Date:	04/06/2005
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2005
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Groundwater
Action ID:	5
Operable Unit:	02
Action Name:	Explanation of Significant Differences
Action Taken Date:	10/04/2006
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	2007
NPL Status:	Currently on the Final NPL

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 5
Operable Unit: 02
Action Name: Explanation of Significant Differences
Action Taken Date: 10/04/2006
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2007
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 7
Operable Unit: 09
Action Name: Explanation of Significant Differences
Action Taken Date: 05/21/2018
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2018
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 03
Action Name: ROD Amendment
Action Taken Date: 09/30/2009
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2009
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 1
Operable Unit: 04
Action Name: Record of Decision
Action Taken Date: 03/15/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Soil
Action ID:	1
Operable Unit:	04
Action Name:	Record of Decision
Action Taken Date:	03/15/1994
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1994
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Soil
Action ID:	2
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	08/23/1994
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1994
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Solid Waste
Action ID:	2
Operable Unit:	02
Action Name:	Record of Decision
Action Taken Date:	08/23/1994
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1994
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Groundwater
Action ID:	2

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 08/23/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 2
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 08/23/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 2
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 08/23/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 2
Operable Unit: 02
Action Name: Record of Decision
Action Taken Date: 08/23/1994
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 3
Operable Unit: 05
Action Name: Record of Decision
Action Taken Date: 04/13/1995
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1995
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 4
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 09/29/1995
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1995
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 4
Operable Unit: 01
Action Name: Record of Decision
Action Taken Date: 09/29/1995
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1995
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Groundwater
Action ID:	4
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/29/1995
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1995
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Groundwater
Action ID:	4
Operable Unit:	01
Action Name:	Record of Decision
Action Taken Date:	09/29/1995
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1995
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Groundwater
Action ID:	5
Operable Unit:	03
Action Name:	Record of Decision
Action Taken Date:	01/17/1997
Event Code:	Not reported
Contact Name:	Not reported
Contact Telephone:	Not reported
Event:	Not reported
Federal Facility:	Y
Fiscal Year:	1997
NPL Status:	Currently on the Final NPL
Superfund Alternative Agreement:	N
Latitude:	+36.625000
Longitude:	-121.750000
EPA ID:	CA7210020676
Contaminated Media:	Soil
Action ID:	5
Operable Unit:	03

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 6
Operable Unit: 06
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 11
Operable Unit: 10
Action Name: Record of Decision
Action Taken Date: 05/15/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 13
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 09/20/2002
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2002
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 13
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 09/20/2002
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2002
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 13
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 09/20/2002
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2002
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 14
Operable Unit: 11
Action Name: Record of Decision
Action Taken Date: 02/06/2008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 14
Operable Unit: 11
Action Name: Record of Decision
Action Taken Date: 02/06/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 14
Operable Unit: 11
Action Name: Record of Decision
Action Taken Date: 02/06/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 14
Operable Unit: 11
Action Name: Record of Decision
Action Taken Date: 02/06/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Groundwater
Action ID: 14
Operable Unit: 11
Action Name: Record of Decision
Action Taken Date: 02/06/2008
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 19
Operable Unit: 12
Action Name: Record of Decision
Action Taken Date: 11/25/2014
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2015
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 22
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 03/29/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Contaminated Media: Solid Waste
Action ID: 22
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 03/29/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 22
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 03/29/2017
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Solid Waste
Action ID: 23
Operable Unit: 09
Action Name: Record of Decision
Action Taken Date: 09/03/2015
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2015
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

EPA ID: CA7210020676
Contaminated Media: Soil
Action ID: 5
Operable Unit: 03
Action Name: Record of Decision
Action Taken Date: 01/17/1997
Event Code: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

US INST CONTROLS:

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 17
Operable Unit: 12
Actual Date: 09/21/2018
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2018
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 18
Operable Unit: 12
Actual Date: 02/26/2015
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2015
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 19
Operable Unit: 12
Actual Date: 11/25/2014
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2015
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Explanation of Significant Differences
Action ID: 6
Operable Unit: 01
Actual Date: 07/14/2010
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2010
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 5
Operable Unit: 03
Actual Date: 01/17/1997
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 11
Operable Unit: 10
Actual Date: 05/15/2008
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 14
Operable Unit: 11
Actual Date: 02/06/2008
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 15
Operable Unit: 09
Actual Date: 11/21/2008
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2009
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 2
Operable Unit: 02
Actual Date: 08/23/1994
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 2
Operable Unit: 02
Actual Date: 08/23/1994
Contaminated Media: Soil
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Action ID: 2
Operable Unit: 02
Actual Date: 08/23/1994
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1994
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 21
Operable Unit: 12
Actual Date: 01/18/2017
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 22
Operable Unit: 09
Actual Date: 03/29/2017
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2017
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 5
Operable Unit: 03
Actual Date: 01/17/1997
Contaminated Media: Groundwater
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 1997
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 16
Operable Unit: 09
Actual Date: 08/26/2008
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y
Fiscal Year: 2008
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
Address 2: Not reported
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
Action Name: Record of Decision
Action ID: 20
Operable Unit: 12
Actual Date: 09/21/2018
Contaminated Media: Solid Waste
Event Code: Not reported
Contact Name: Not reported
Contact Telephone: Not reported
Event: Not reported
Federal Facility: Y

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Fiscal Year: 2018
NPL Status: Currently on the Final NPL
Superfund Alternative Agreement: N
Latitude: +36.625000
Longitude: -121.750000

ROD:

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: LANDFILL (OU 02)
SEQ ID: 1
Action Completion: 1995-08-23 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: LANDFILL (OU 02)
SEQ ID: 2
Action Completion: 1997-01-17 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: OVERALL SITE (OU 03)
SEQ ID: 3
Action Completion: 2003-12-01 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: OE TRACK 0 (OU 08)
SEQ ID: 4
Action Completion: 2005-04-26 00:00:00
NPL Status: Final

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: LANDFILL (OU 02)
SEQ ID: 5
Action Completion: 2006-10-04 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: FIRE DRILL AREA (OU 01)
SEQ ID: 6
Action Completion: 2010-07-14 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ESD
Operable Unit Number: OE TRACK 2 (OU 10)
SEQ ID: 7
Action Completion: 2018-05-21 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: SURFACE SOILS (OU 04)
SEQ ID: 1
Action Completion: 1994-03-15 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: LANDFILL (OU 02)
SEQ ID: 2
Action Completion: 1994-08-23 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: NO ACTION SOILS (OU 05)
SEQ ID: 3
Action Completion: 1995-04-13 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OVERALL SITE (OU 03)
SEQ ID: 5
Action Completion: 1997-01-17 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 0 (OU 08)
SEQ ID: 8
Action Completion: 2002-07-02 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 1 (OU 09)

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

SEQ ID: 9
Action Completion: 2005-04-06 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 3 (OU 11)
SEQ ID: 11
Action Completion: 2008-05-15 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 2 (OU 10)
SEQ ID: 13
Action Completion: 2002-09-20 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: CARBON TET PLUME (OU 12)
SEQ ID: 14
Action Completion: 2008-02-06 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 2 (OU 10)
SEQ ID: 15
Action Completion: 2008-11-21 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 2 (OU 10)
SEQ ID: 16
Action Completion: 2008-08-26 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: PRIVATIZATION PARCELS (OU 13)
SEQ ID: 17
Action Completion: 2018-09-21 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: PRIVATIZATION PARCELS (OU 13)
SEQ ID: 18
Action Completion: 2015-02-26 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: PRIVATIZATION PARCELS (OU 13)
SEQ ID: 19
Action Completion: 2014-11-25 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: PRIVATIZATION PARCELS (OU 13)
SEQ ID: 20
Action Completion: 2018-09-21 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: PRIVATIZATION PARCELS (OU 13)
SEQ ID: 21
Action Completion: 2017-01-18 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 2 (OU 10)
SEQ ID: 22
Action Completion: 2017-03-29 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD (RCRA Statement of Basis/RTC)
Operable Unit Number: OE TRACK 2 (OU 10)
SEQ ID: 23
Action Completion: 2015-09-03 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: FF ROD Amendment
Operable Unit Number: OVERALL SITE (OU 03)
SEQ ID: 1
Action Completion: 2009-09-30 00:00:00

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD (Continued)

1000393341

NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: GOVT Decision Document (ROD)
Operable Unit Number: FIRE DRILL AREA (OU 01)
SEQ ID: 4
Action Completion: 1995-09-29 00:00:00
NPL Status: Final
Non NPL Status: Not reported

Name: FORT ORD
Address: FORMER ARMY BASE FORT ORD
City,State,Zip: MARINA, CA 93933
EPA ID: CA7210020676
RG: 9
Site ID: 902783
Action: GOVT Decision Document (ROD)
Operable Unit Number: SITE 3 BEACH RANGE (OU 07)
SEQ ID: 6
Action Completion: 1997-01-17 00:00:00
NPL Status: Final
Non NPL Status: Not reported

PRP:
PRP Name: FORT ORD REUSE AUTHORITY
U.S. ARMY

PRP:
Name: FORT ORD
Address: Not reported
City,State,Zip: Not reported
Superfund EPAID: UTD093119196
Superfund Name: PETROCHEM RECYCLING CORP./EKOTEK PLANT
Superfund Address: 1628 N CHICAGO ST
Superfund City,State,Zip: SALT LAKE CITY, UT 84116
NPL Status: Deleted from the Final NPL
NPL Status Short Name: Not reported
Data Type: SETTLEMENT DATE
Action Date: 7/12/1994
Settlement Code: AC-3
Settlement: ADM ORDR
Latitude: +40.803190
Longitude: -111.917713

Name: FORT ORD
Address: Not reported
City,State,Zip: Not reported
Superfund EPAID: UTD093119196
Superfund Name: PETROCHEM RECYCLING CORP./EKOTEK PLANT
Superfund Address: 1628 N CHICAGO ST
Superfund City,State,Zip: SALT LAKE CITY, UT 84116

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

FORT ORD (Continued)

1000393341

NPL Status: Deleted from the Final NPL
 NPL Status Short Name: Not reported
 Data Type: SETTLEMENT DATE
 Action Date: 10/27/1994
 Settlement Code: AC-4
 Settlement: ADM ORDR
 Latitude: +40.803190
 Longitude: -111.917713

PFAS NPL:

EPA Region: 09
 Name: FORT ORD
 Address: FORMER ARMY BASE FORT ORD
 City,State,Zip: MARINA, CA 93933
 EPAID: CA7210020676
 Superfund Link: <https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0902783&mssp=med>
 Data Systems: SEMS
 Last Updated: 2019-02-28 00:00:00
 Programs: Superfund
 Location Type: Federal
 NPL Site: Y
 NPL Status: Final
 Media Detected: GW
 Health Advisory: N
 DW Response: -
 Latitude: 36.625
 Longitude: -121.75
 EJSCREEN Report: https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-121.75,%22y%22:36.625,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1

1
SSE
1/8-1/4
0.205 mi.
1081 ft.

MISSION MEMORIAL PARK & SEASIDE FUNERAL HOMECLOS**
3301 MONTEREY BLDG 4463
SEASIDE, CA

CUPA Listings S111464769
N/A

Relative:
Higher
Actual:
211 ft.

CUPA MONTEREY:
 Name: MISSION MEMORIAL PARK & SEASIDE FUNERAL HOME**CLOSED**
 Address: 3301 MONTEREY BLDG 4463
 City,State,Zip: SEASIDE, CA
 Facility Id: FA0824603
 Region: MONTEREY
 Program/Element Code: 5040
 Program/Element: 5040 - BASE FEE-HAZARDOUS MATERIALS REGISTRATION
 Billing Status: 02 - INACTIVE, NON-BILLABLE
 EDR Link ID: FA0824603
 Mailing Address: SALINAS CA
 Mailing Address Care Of: Not reported
 Mailing City State Zip: SALINAS CA
 Program Identifier: Not reported
 Owner ID: OW0809981
 Last Billing Date: Not reported
 Last Payment Date: Not reported
 Last Payment Amount: 0.00
 Total Fee Amount: 0.00

Map ID
 Direction
 Distance
 Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
 EPA ID Number

MISSION MEMORIAL PARK & SEASIDE FUNERAL HOMECLOSED** (Continued)**

S111464769

Total Amount Paid: Not reported
 Units: Not reported
 Financial Status: (none)
 Phone: Not reported
 Last Activity Date: Not reported
 Prior Inspection Date: Not reported
 Current Inspection Date: Not reported
 Record ID: PR0630332
 Email: Not reported

2
South
1/4-1/2
0.270 mi.
1424 ft.

6 ARMY RD.,(1800 GAL) AND BLDG
100 CALIFORNIA (900 GAL)
FORT ORD, CA 93941

Notify 65 S100179849
N/A

Relative:
Higher
Actual:
219 ft.

NOTIFY 65:
 Name: 6 ARMY RD.,(1800 GAL) AND BLDG
 Address: 100 CALIFORNIA (900 GAL)
 City,State,Zip: FORT ORD, CA 93941
 Date Reported: Not reported
 Staff Initials: Not reported
 Board File Number: Not reported
 Facility Type: Not reported
 Discharge Date: Not reported
 Issue Date: Not reported
 Incident Description: Not reported
 Global ID: Not reported
 Status: Not reported

3
NW
1/2-1
0.659 mi.
3482 ft.

FORT ORD STATE PARK-MOU WITH DPR
INTERSECTION OF HWY 1 AND 8TH STREET
CITY OF MARINA, CA 93933

ENVIROSTOR S108974304
DEED N/A

Relative:
Lower
Actual:
120 ft.

ENVIROSTOR:
 Name: FORT ORD STATE PARK-MOU WITH DPR
 Address: INTERSECTION OF HWY 1 AND 8TH STREET
 City,State,Zip: CITY OF MARINA, CA 93933
 Facility ID: 80001207
 Status: Active
 Status Date: 12/27/2007
 Site Code: 201772
 Site Type: Federal Superfund
 Site Type Detailed: Closed Base
 Acres: 979
 NPL: YES
 Regulatory Agencies: SMBRP
 Lead Agency: SMBRP
 Program Manager: Jane Numazu
 Supervisor: Duane White
 Division Branch: Cleanup Sacramento
 Assembly: 29
 Senate: 17
 Special Program: Voluntary Agreement - Standard Voluntary Agreement

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD STATE PARK-MOU WITH DPR (Continued)

S108974304

Restricted Use: YES
Site Mgmt Req: NONE SPECIFIED
Funding: Other Non-Military Funds
Latitude: 36.65247
Longitude: -121.8230
APN: NONE SPECIFIED
Past Use: FIRING RANGE - SMALL ARMS ETC...
Potential COC: Lead
Confirmed COC: 30013-NO
Potential Description: SOIL
Alias Name: 110033614765
Alias Type: EPA (FRS #)
Alias Name: 201772
Alias Type: Project Code (Site Code)
Alias Name: 80001207
Alias Type: Envirostor ID Number

Completed Info:

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 06/01/2009
Comments: Historical document

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: 5 Year Review Reports
Completed Date: 10/06/2017
Comments: Completed

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 09/30/2012
Comments: Historical document

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 07/30/2021
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Deed/LUR Enforcement & Implementation Plan
Completed Date: 11/27/2007
Comments: This MOU provides for implementation of soil and groundwater restrictions for portion of Former Fort Ord property transferred to Park Service, known as the Fort Ord Dunes State Park.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 02/23/2021
Comments: DTSC accepts the Report as written.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD STATE PARK-MOU WITH DPR (Continued)

S108974304

Completed Document Type: Memorandum of Agreement - IAG
Completed Date: 05/29/2020
Comments: DTSC does not recommend changes. Inspection frequencies are to remain at quarterly. Human health and environmental risk assessments must meet requirements in DTSC s Human and Environmental Risk Assessment Note 3.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction
Completed Date: 02/24/2009
Comments: The restrictions from this Land Use Covenant are for 858 acres of Parcel S3.1.1. Soil on the property contains lead, including

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/16/2011
Comments: Historical document. 2010 Annual Report

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Other Report
Completed Date: 01/22/2004
Comments: Historical document

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 07/21/2017
Comments: The 2011 - 2016 Annual letter report for monitoring of the Dunes State Park was submitted on July 21, 2017.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Monitoring Report
Completed Date: 06/02/2020
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 04/23/2019
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Land Use Restriction Monitoring Report
Completed Date: 02/28/2018
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported

Map ID
Direction
Distance
Elevation

MAP FINDINGS

Site

Database(s)

EDR ID Number
EPA ID Number

FORT ORD STATE PARK-MOU WITH DPR (Continued)

S108974304

Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

DEED:

Name: FORT ORD STATE PARK-MOU WITH DPR
Address: INTERSECTION OF HWY 1 AND 8TH STREET
City,State,Zip: CITY OF MARINA, CA 93933
Envirostor ID: 80001207
Area: PROJECT WIDE
Sub Area: Not reported
Site Type: FEDERAL SUPERFUND
Status: ACTIVE
Agency: Not reported
Covenant Uploaded: Not reported
Deed Date(s): Not reported
File Name: Envirostor Land Use Restrictions

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NO SITES FOUND					

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Lists of Federal NPL (Superfund) sites

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 01/25/2023	Source: EPA
Date Data Arrived at EDR: 02/03/2023	Telephone: N/A
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 04/03/2023
Number of Days to Update: 25	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 01/25/2023	Source: EPA
Date Data Arrived at EDR: 02/02/2023	Telephone: N/A
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 04/03/2023
Number of Days to Update: 26	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Lists of Federal Delisted NPL sites

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: N/A
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

Lists of Federal sites subject to CERCLA removals and CERCLA orders

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 12/20/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 03/28/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly known as CERCLIS, renamed to SEMs by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Quarterly

Lists of Federal CERCLA sites with NFRAP

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 01/25/2023	Source: EPA
Date Data Arrived at EDR: 02/02/2023	Telephone: 800-424-9346
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 04/03/2023
Number of Days to Update: 26	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA facilities undergoing Corrective Action

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/06/2023	Source: EPA
Date Data Arrived at EDR: 03/09/2023	Telephone: 800-424-9346
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA TSD facilities

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

Lists of Federal RCRA generators

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

RCRA-VSQG: RCRA - Very Small Quantity Generators (Formerly Conditionally Exempt Small Quantity Generators)

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Very small quantity generators (VSQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/06/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2023	Telephone: (415) 495-8895
Date Made Active in Reports: 03/20/2023	Last EDR Contact: 03/09/2023
Number of Days to Update: 11	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 11/02/2022	Source: Department of the Navy
Date Data Arrived at EDR: 11/08/2022	Telephone: 843-820-7326
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 02/03/2023
Number of Days to Update: 63	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 10/27/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/16/2022	Telephone: 703-603-0695
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 02/21/2023
Number of Days to Update: 85	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

US INST CONTROLS: Institutional Controls Sites List

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 10/27/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/16/2022	Telephone: 703-603-0695
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 02/21/2023
Number of Days to Update: 85	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 12/12/2022

Source: National Response Center, United States Coast Guard

Date Data Arrived at EDR: 12/14/2022

Telephone: 202-267-2180

Date Made Active in Reports: 12/19/2022

Last EDR Contact: 03/21/2023

Number of Days to Update: 5

Next Scheduled EDR Contact: 07/03/2023

Data Release Frequency: Quarterly

Lists of state- and tribal (Superfund) equivalent sites

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 10/24/2022

Source: Department of Toxic Substances Control

Date Data Arrived at EDR: 10/24/2022

Telephone: 916-323-3400

Date Made Active in Reports: 01/12/2023

Last EDR Contact: 01/24/2023

Number of Days to Update: 80

Next Scheduled EDR Contact: 05/08/2023

Data Release Frequency: Quarterly

Lists of state- and tribal hazardous waste facilities

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 10/24/2022

Source: Department of Toxic Substances Control

Date Data Arrived at EDR: 10/24/2022

Telephone: 916-323-3400

Date Made Active in Reports: 01/12/2023

Last EDR Contact: 01/24/2023

Number of Days to Update: 80

Next Scheduled EDR Contact: 05/08/2023

Data Release Frequency: Quarterly

Lists of state and tribal landfills and solid waste disposal facilities

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inventory of solid waste disposal facilities or landfills. These may be active or inactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 11/03/2022

Source: Department of Resources Recycling and Recovery

Date Data Arrived at EDR: 11/03/2022

Telephone: 916-341-6320

Date Made Active in Reports: 01/25/2023

Last EDR Contact: 02/07/2023

Number of Days to Update: 83

Next Scheduled EDR Contact: 05/22/2023

Data Release Frequency: Quarterly

Lists of state and tribal leaking storage tanks

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004	Source: California Regional Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 09/07/2004	Telephone: 213-576-6710
Date Made Active in Reports: 10/12/2004	Last EDR Contact: 09/06/2011
Number of Days to Update: 35	Next Scheduled EDR Contact: 12/19/2011
	Data Release Frequency: No Update Planned

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008	Source: California Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 07/22/2008	Telephone: 916-464-4834
Date Made Active in Reports: 07/31/2008	Last EDR Contact: 07/01/2011
Number of Days to Update: 9	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004	Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Date Data Arrived at EDR: 02/26/2004	Telephone: 760-776-8943
Date Made Active in Reports: 03/24/2004	Last EDR Contact: 08/01/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005	Source: California Regional Water Quality Control Board Santa Ana Region (8)
Date Data Arrived at EDR: 02/15/2005	Telephone: 909-782-4496
Date Made Active in Reports: 03/28/2005	Last EDR Contact: 08/15/2011
Number of Days to Update: 41	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/19/2003	Telephone: 805-542-4786
Date Made Active in Reports: 06/02/2003	Last EDR Contact: 07/18/2011
Number of Days to Update: 14	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004	Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-622-2433
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001	Source: California Regional Water Quality Control Board North Coast (1)
Date Data Arrived at EDR: 02/28/2001	Telephone: 707-570-3769
Date Made Active in Reports: 03/29/2001	Last EDR Contact: 08/01/2011
Number of Days to Update: 29	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005	Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Date Data Arrived at EDR: 06/07/2005	Telephone: 760-241-7365
Date Made Active in Reports: 06/29/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 22	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)

Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: see region list
Date Made Active in Reports: 03/30/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 23	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003	Source: California Regional Water Quality Control Board Lahontan Region (6)
Date Data Arrived at EDR: 09/10/2003	Telephone: 530-542-5572
Date Made Active in Reports: 10/07/2003	Last EDR Contact: 09/12/2011
Number of Days to Update: 27	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001	Source: California Regional Water Quality Control Board San Diego Region (9)
Date Data Arrived at EDR: 04/23/2001	Telephone: 858-637-5595
Date Made Active in Reports: 05/21/2001	Last EDR Contact: 09/26/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 01/09/2012
	Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 11/23/2022	Source: EPA Region 6
Date Data Arrived at EDR: 12/06/2022	Telephone: 214-665-6597
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 01/17/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Florida, Mississippi and North Carolina.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/26/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/19/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/20/2022
Date Data Arrived at EDR: 06/13/2022
Date Made Active in Reports: 08/16/2022
Number of Days to Update: 64

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)

Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003	Source: California Regional Water Quality Control Board, North Coast Region (1)
Date Data Arrived at EDR: 04/07/2003	Telephone: 707-576-2220
Date Made Active in Reports: 04/25/2003	Last EDR Contact: 08/01/2011
Number of Days to Update: 18	Next Scheduled EDR Contact: 11/14/2011
	Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004	Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Date Data Arrived at EDR: 10/20/2004	Telephone: 510-286-0457
Date Made Active in Reports: 11/19/2004	Last EDR Contact: 09/19/2011
Number of Days to Update: 30	Next Scheduled EDR Contact: 01/02/2012
	Data Release Frequency: No Update Planned

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006	Source: California Regional Water Quality Control Board Central Coast Region (3)
Date Data Arrived at EDR: 05/18/2006	Telephone: 805-549-3147
Date Made Active in Reports: 06/15/2006	Last EDR Contact: 07/18/2011
Number of Days to Update: 28	Next Scheduled EDR Contact: 10/31/2011
	Data Release Frequency: No Update Planned

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004	Source: Region Water Quality Control Board Los Angeles Region (4)
Date Data Arrived at EDR: 11/18/2004	Telephone: 213-576-6600
Date Made Active in Reports: 01/04/2005	Last EDR Contact: 07/01/2011
Number of Days to Update: 47	Next Scheduled EDR Contact: 10/17/2011
	Data Release Frequency: No Update Planned

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005	Source: Regional Water Quality Control Board Central Valley Region (5)
Date Data Arrived at EDR: 04/05/2005	Telephone: 916-464-3291
Date Made Active in Reports: 04/21/2005	Last EDR Contact: 09/12/2011
Number of Days to Update: 16	Next Scheduled EDR Contact: 12/26/2011
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 6L: SLIC Sites

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing

The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: No Update Planned

Lists of state and tribal registered storage tanks

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 10/14/2021
Date Data Arrived at EDR: 11/05/2021
Date Made Active in Reports: 02/01/2022
Number of Days to Update: 88

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MILITARY UST SITES: Military UST Sites (GEOTRACKER)

Military ust sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases

UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 12/02/2022
Date Made Active in Reports: 02/23/2023
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

UST: Active UST Facilities

Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/02/2022
Date Data Arrived at EDR: 12/02/2022
Date Made Active in Reports: 02/22/2023
Number of Days to Update: 82

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities

A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 11/23/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 10/14/2022
Date Data Arrived at EDR: 12/06/2022
Date Made Active in Reports: 03/03/2023
Number of Days to Update: 87

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/19/2022	Source: EPA, Region 1
Date Data Arrived at EDR: 12/06/2022	Telephone: 617-918-1313
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 01/17/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 10/14/2022	Source: EPA Region 7
Date Data Arrived at EDR: 12/06/2022	Telephone: 913-551-7003
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 01/17/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/23/2022	Source: EPA Region 4
Date Data Arrived at EDR: 12/06/2022	Telephone: 404-562-9424
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 01/17/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 11/23/2022	Source: EPA Region 9
Date Data Arrived at EDR: 12/06/2022	Telephone: 415-972-3368
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 01/17/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 11/23/2022	Source: EPA Region 8
Date Data Arrived at EDR: 12/06/2022	Telephone: 303-312-6137
Date Made Active in Reports: 03/03/2023	Last EDR Contact: 01/17/2023
Number of Days to Update: 87	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/20/2022	Source: EPA Region 10
Date Data Arrived at EDR: 06/13/2022	Telephone: 206-553-2857
Date Made Active in Reports: 08/16/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 64	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Lists of state and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: 913-551-7365
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 07/08/2021
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 10/24/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/24/2022	Telephone: 916-323-3400
Date Made Active in Reports: 01/12/2023	Last EDR Contact: 01/24/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Quarterly

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 09/29/2015	Telephone: 617-918-1102
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 03/17/2023
Number of Days to Update: 142	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Varies

Lists of state and tribal brownfield sites

BROWNFIELDS: Considered Brownfields Sites Listing

A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 12/14/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/14/2022	Telephone: 916-323-7905
Date Made Active in Reports: 03/07/2023	Last EDR Contact: 03/21/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 02/23/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/10/2022	Telephone: 202-566-2777
Date Made Active in Reports: 03/10/2022	Last EDR Contact: 04/04/2023
Number of Days to Update: 0	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000	Source: State Water Resources Control Board
Date Data Arrived at EDR: 04/10/2000	Telephone: 916-227-4448
Date Made Active in Reports: 05/10/2000	Last EDR Contact: 01/20/2023
Number of Days to Update: 30	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 12/02/2022	Source: Department of Conservation
Date Data Arrived at EDR: 12/02/2022	Telephone: 916-323-3836
Date Made Active in Reports: 02/22/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 11/16/2022	Source: Integrated Waste Management Board
Date Data Arrived at EDR: 11/22/2022	Telephone: 916-341-6422
Date Made Active in Reports: 02/13/2023	Last EDR Contact: 02/15/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998	Source: Environmental Protection Agency
Date Data Arrived at EDR: 12/03/2007	Telephone: 703-308-8245
Date Made Active in Reports: 01/24/2008	Last EDR Contact: 01/20/2023
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Varies

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009	Source: EPA, Region 9
Date Data Arrived at EDR: 05/07/2009	Telephone: 415-947-4219
Date Made Active in Reports: 09/21/2009	Last EDR Contact: 01/13/2023
Number of Days to Update: 137	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: No Update Planned

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/09/2004	Telephone: 800-424-9346
Date Made Active in Reports: 09/17/2004	Last EDR Contact: 06/09/2004
Number of Days to Update: 39	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

IHS OPEN DUMPS: Open Dumps on Indian Land

A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014	Source: Department of Health & Human Services, Indian Health Service
Date Data Arrived at EDR: 08/06/2014	Telephone: 301-443-1452
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 01/27/2023
Number of Days to Update: 176	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 01/06/2023	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/02/2023	Telephone: 202-307-1000
Date Made Active in Reports: 02/10/2023	Last EDR Contact: 02/02/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database

The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 08/03/2006	Telephone: 916-323-3400
Date Made Active in Reports: 08/24/2006	Last EDR Contact: 02/23/2009
Number of Days to Update: 21	Next Scheduled EDR Contact: 05/25/2009
	Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program

This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 10/24/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 10/24/2022	Telephone: 916-323-3400
Date Made Active in Reports: 01/12/2023	Last EDR Contact: 01/24/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2020	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 11/30/2022	Telephone: 916-255-6504
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 03/22/2023
Number of Days to Update: 71	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995	Source: State Water Resources Control Board
Date Data Arrived at EDR: 08/30/1995	Telephone: 916-227-4364
Date Made Active in Reports: 09/26/1995	Last EDR Contact: 01/26/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 04/27/2009
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CERS HAZ WASTE: CERS HAZ WASTE

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 01/05/2023	Source: CalEPA
Date Data Arrived at EDR: 01/06/2023	Telephone: 916-323-2514
Date Made Active in Reports: 01/11/2023	Last EDR Contact: 01/06/2023
Number of Days to Update: 5	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 01/06/2023	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 02/02/2023	Telephone: 202-307-1000
Date Made Active in Reports: 02/10/2023	Last EDR Contact: 02/02/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994	Source: State Water Resources Control Board
Date Data Arrived at EDR: 07/07/2005	Telephone: N/A
Date Made Active in Reports: 08/11/2005	Last EDR Contact: 06/03/2005
Number of Days to Update: 35	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990	Source: State Water Resources Control Board
Date Data Arrived at EDR: 01/25/1991	Telephone: 916-341-5851
Date Made Active in Reports: 02/12/1991	Last EDR Contact: 07/26/2001
Number of Days to Update: 18	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing

Aboveground storage tank sites

Date of Government Version: 11/03/2022	Source: San Francisco County Department of Public Health
Date Data Arrived at EDR: 11/07/2022	Telephone: 415-252-3896
Date Made Active in Reports: 01/24/2023	Last EDR Contact: 01/27/2023
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

CERS TANKS: California Environmental Reporting System (CERS) Tanks

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/06/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/11/2023
Number of Days to Update: 5

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 10/17/2022
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Quarterly

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/23/2023
Date Data Arrived at EDR: 02/24/2023
Date Made Active in Reports: 03/23/2023
Number of Days to Update: 27

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 76

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 12/13/2022	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 12/14/2022	Telephone: 202-366-4555
Date Made Active in Reports: 03/10/2023	Last EDR Contact: 03/21/2023
Number of Days to Update: 86	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 08/02/2022	Source: Office of Emergency Services
Date Data Arrived at EDR: 10/17/2022	Telephone: 916-845-8400
Date Made Active in Reports: 01/04/2023	Last EDR Contact: 01/20/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Quality Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/30/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 23	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 03/06/2023	Source: State Water Resources Control Board
Date Data Arrived at EDR: 03/07/2023	Telephone: 866-480-1028
Date Made Active in Reports: 03/31/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012	Source: FirstSearch
Date Data Arrived at EDR: 01/03/2013	Telephone: N/A
Date Made Active in Reports: 02/22/2013	Last EDR Contact: 01/03/2013
Number of Days to Update: 50	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 91

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 06/07/2021
Date Data Arrived at EDR: 07/13/2021
Date Made Active in Reports: 03/09/2022
Number of Days to Update: 239

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/11/2018
Date Made Active in Reports: 11/06/2019
Number of Days to Update: 574

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 07/30/2021
Date Data Arrived at EDR: 02/03/2023
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/10/2023
Number of Days to Update: 86

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/21/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/21/2014	Telephone: 617-520-3000
Date Made Active in Reports: 06/17/2014	Last EDR Contact: 01/30/2023
Number of Days to Update: 88	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/08/2018	Telephone: 703-308-4044
Date Made Active in Reports: 07/20/2018	Last EDR Contact: 02/03/2023
Number of Days to Update: 73	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2020	Source: EPA
Date Data Arrived at EDR: 06/14/2022	Telephone: 202-260-5521
Date Made Active in Reports: 03/24/2023	Last EDR Contact: 03/13/2023
Number of Days to Update: 283	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2021	Source: EPA
Date Data Arrived at EDR: 11/01/2022	Telephone: 202-566-0250
Date Made Active in Reports: 02/09/2023	Last EDR Contact: 02/16/2023
Number of Days to Update: 100	Next Scheduled EDR Contact: 05/29/2023
	Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 10/17/2022	Source: EPA
Date Data Arrived at EDR: 10/18/2022	Telephone: 202-564-4203
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 01/18/2023
Number of Days to Update: 84	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 04/27/2022
Date Data Arrived at EDR: 05/04/2022
Date Made Active in Reports: 05/10/2022
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 11/01/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 14

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 11/03/2022
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 89

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/23/2016	Telephone: 202-564-2501
Date Made Active in Reports: 02/10/2017	Last EDR Contact: 03/29/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: 202-566-1667
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 08/18/2017
Number of Days to Update: 25	Next Scheduled EDR Contact: 12/04/2017
	Data Release Frequency: No Update Planned

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 10/26/2022	Source: Nuclear Regulatory Commission
Date Data Arrived at EDR: 11/22/2022	Telephone: 301-415-7169
Date Made Active in Reports: 12/05/2022	Last EDR Contact: 01/17/2023
Number of Days to Update: 13	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2020	Source: Department of Energy
Date Data Arrived at EDR: 11/30/2021	Telephone: 202-586-8719
Date Made Active in Reports: 02/22/2022	Last EDR Contact: 03/03/2023
Number of Days to Update: 84	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 01/12/2017	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/05/2019	Telephone: N/A
Date Made Active in Reports: 11/11/2019	Last EDR Contact: 02/27/2023
Number of Days to Update: 251	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 09/13/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 11/06/2019	Telephone: 202-566-0517
Date Made Active in Reports: 02/10/2020	Last EDR Contact: 02/03/2023
Number of Days to Update: 96	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/01/2019	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/01/2019	Telephone: 202-343-9775
Date Made Active in Reports: 09/23/2019	Last EDR Contact: 03/23/2023
Number of Days to Update: 84	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2007
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/01/2007	Telephone: 202-564-2501
Date Made Active in Reports: 04/10/2007	Last EDR Contact: 12/17/2008
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/17/2008
	Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 01/02/2020	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 01/28/2020	Telephone: 202-366-4595
Date Made Active in Reports: 04/17/2020	Last EDR Contact: 01/24/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/30/2022
Date Data Arrived at EDR: 10/21/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 81

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 03/09/2023
Date Made Active in Reports: 03/20/2023
Number of Days to Update: 11

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 07/26/2021
Date Data Arrived at EDR: 07/27/2021
Date Made Active in Reports: 10/22/2021
Number of Days to Update: 87

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/30/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 08/30/2019
Date Data Arrived at EDR: 11/15/2019
Date Made Active in Reports: 01/28/2020
Number of Days to Update: 74

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 01/25/2023
Date Data Arrived at EDR: 02/02/2023
Date Made Active in Reports: 02/28/2023
Number of Days to Update: 26

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/03/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

MINES VIOLATIONS: MSHA Violation Assessment Data

Mines violation and assessment information. Department of Labor, Mine Safety & Health Administration.

Date of Government Version: 02/27/2023
Date Data Arrived at EDR: 03/01/2023
Date Made Active in Reports: 03/24/2023
Number of Days to Update: 23

Source: DOL, Mine Safety & Health Admi
Telephone: 202-693-9424
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 11/17/2022
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 85

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/22/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 05/06/2020
Date Data Arrived at EDR: 05/27/2020
Date Made Active in Reports: 08/13/2020
Number of Days to Update: 78

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 02/24/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011	Source: USGS
Date Data Arrived at EDR: 06/08/2011	Telephone: 703-648-7709
Date Made Active in Reports: 09/13/2011	Last EDR Contact: 02/24/2023
Number of Days to Update: 97	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 12/20/2022	Source: Department of Interior
Date Data Arrived at EDR: 12/20/2022	Telephone: 202-208-2609
Date Made Active in Reports: 03/10/2023	Last EDR Contact: 03/16/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/02/2023	Source: EPA
Date Data Arrived at EDR: 02/28/2023	Telephone: (415) 947-8000
Date Made Active in Reports: 03/24/2023	Last EDR Contact: 02/28/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 11/09/2021	Source: Department of Defense
Date Data Arrived at EDR: 10/20/2022	Telephone: 703-704-1564
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 01/09/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: Varies

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/06/2021	Source: Environmental Protection Agency
Date Data Arrived at EDR: 05/21/2021	Telephone: 202-564-0527
Date Made Active in Reports: 08/11/2021	Last EDR Contact: 02/24/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/01/2023
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 04/03/2023
Number of Days to Update: 89

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 03/31/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 11/10/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/09/2023
Number of Days to Update: 91

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

PFAS NPL: Superfund Sites with PFAS Detections Information

EPA's Office of Land and Emergency Management and EPA Regional Offices maintain data describing what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 07/08/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 123

Source: Environmental Protection Agency
Telephone: 703-603-8895
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS FEDERAL SITES: Federal Sites PFAS Information

Several federal entities, such as the federal Superfund program, Department of Defense, National Aeronautics and Space Administration, Department of Transportation, and Department of Energy provided information for sites with known or suspected detections at federal facilities.

Date of Government Version: 02/23/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS TSCA: PFAS Manufacture and Imports Information

EPA issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. EPA publishes non-confidential business information (non-CBI) and includes descriptive information about each site, corporate parent, production volume, other manufacturing information, and processing and use information.

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

PFAS RCRA MANIFEST: PFAS Transfers Identified In the RCRA Database Listing

To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: PFAS, PFOA, PFOS, PERFL, AFFF, GENX, GEN-X (plus the VT waste codes). These keywords were searched for in the following text fields: Manifest handling instructions (MANIFEST_HANDLING_INSTR), Non-hazardous waste description (NON_HAZ_WASTE_DESCRIPTION), DOT printed information (DOT_PRINTED_INFORMATION), Waste line handling instructions (WASTE_LINE_HANDLING_INSTR), Waste residue comments (WASTE_RESIDUE_COMMENTS).

Date of Government Version: 01/03/2022
Date Data Arrived at EDR: 03/31/2022
Date Made Active in Reports: 11/08/2022
Number of Days to Update: 222

Source: Environmental Protection Agency
Telephone: 202-272-0167
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PFAS ATSDR: PFAS Contamination Site Location Listing

PFAS contamination site locations from the Department of Health & Human Services, Center for Disease Control & Prevention. ATSDR is involved at a number of PFAS-related sites, either directly or through assisting state and federal partners. As of now, most sites are related to drinking water contamination connected with PFAS production facilities or fire training areas where aqueous film-forming firefighting foam (AFFF) was regularly used.

Date of Government Version: 06/24/2020	Source: Department of Health & Human Services
Date Data Arrived at EDR: 03/17/2021	Telephone: 202-741-5770
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 01/23/2023
Number of Days to Update: 601	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Varies

PFAS WQP: Ambient Environmental Sampling for PFAS

The Water Quality Portal (WQP) is a part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations and individuals submit project details and sampling results to this public repository. The information is commonly used for research and assessments of environmental quality.

Date of Government Version: 01/03/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 03/30/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS NPDES: Clean Water Act Discharge Monitoring Information

Any discharger of pollutants to waters of the United States from a point source must have a National Pollutant Discharge Elimination System (NPDES) permit. The process for obtaining limits involves the regulated entity (permittee) disclosing releases in a NPDES permit application and the permitting authority (typically the state but sometimes EPA) deciding whether to require monitoring or monitoring with limits.

Date of Government Version: 01/03/2022	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/31/2022	Telephone: 202-272-0167
Date Made Active in Reports: 11/08/2022	Last EDR Contact: 03/30/2023
Number of Days to Update: 222	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS ECHO: Facilities in Industries that May Be Handling PFAS Listing

Regulators and the public have expressed interest in knowing which regulated entities may be using PFAS. EPA has developed a dataset from various sources that show which industries may be handling PFAS. Approximately 120,000 facilities subject to federal environmental programs have operated or currently operate in industry sectors with processes that may involve handling and/or release of PFAS.

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS ECHO FIRE TRAINING: Facilities in Industries that May Be Handling PFAS Listing

A list of fire training sites was added to the Industry Sectors dataset using a keyword search on the permitted facility's name to identify sites where fire-fighting foam may have been used in training exercises. Additionally, you may view an example spreadsheet of the subset of fire training facility data, as well as the keywords used in selecting or deselecting a facility for the subset. as well as the keywords used in selecting or deselecting a facility for the subset. These keywords were tested to maximize accuracy in selecting facilities that may use fire-fighting foam in training exercises, however, due to the lack of a required reporting field in the data systems for designating fire training sites, this methodology may not identify all fire training sites or may potentially misidentify them.

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PFAS PART 139 AIRPORT: All Certified Part 139 Airports PFAS Information Listing

Since July 1, 2006, all certified part 139 airports are required to have fire-fighting foam onsite that meet military specifications (MIL-F-24385) (14 CFR 139.317). To date, these military specification fire-fighting foams are fluorinated and have been historically used for training and extinguishing. The 2018 FAA Reauthorization Act has a provision stating that no later than October 2021, FAA shall not require the use of fluorinated AFFF. This provision does not prohibit the use of fluorinated AFFF at Part 139 civilian airports; it only prohibits FAA from mandating its use. The Federal Aviation Administration's document AC 150/5210-6D - Aircraft Fire Extinguishing Agents provides guidance on Aircraft Fire Extinguishing Agents, which includes Aqueous Film Forming Foam (AFFF).

Date of Government Version: 03/30/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/30/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 4	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

AQUEOUS FOAM NRC: Aqueous Foam Related Incidents Listing

The National Response Center (NRC) serves as an emergency call center that fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. The spreadsheets posted to the NRC website contain initial incident data that has not been validated or investigated by a federal/state response agency. Response center calls from 1990 to the most recent complete calendar year where there was indication of Aqueous Film Forming Foam (AFFF) usage are included in this dataset. NRC calls may reference AFFF usage in the ?Material Involved? or ?Incident Description? fields.

Date of Government Version: 01/02/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/05/2023	Telephone: 202-272-0167
Date Made Active in Reports: 04/03/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 88	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PFAS: PFAS Contamination Site Location Listing

A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 12/02/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 12/02/2022	Telephone: 866-480-1028
Date Made Active in Reports: 02/23/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

AQUEOUS FOAM: Former Fire Training Facility Assessments Listing

Airports shown on this list are those believed to use Aqueous Film Forming Foam (AFFF), and certified by the Federal Aviation Administration (FAA) under Title 14, Code of Federal Regulations (CFR), Part 139 (14 CFR Part 139). This list was created by SWRCB using information available from the FAA. Location points shown are from the latitude and longitude listed on the FAA airport master record.

Date of Government Version: 09/06/2022	Source: State Water Resources Control Board
Date Data Arrived at EDR: 09/06/2022	Telephone: 916-341-5455
Date Made Active in Reports: 10/26/2022	Last EDR Contact: 03/07/2023
Number of Days to Update: 50	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989	Source: Department of Health Services
Date Data Arrived at EDR: 07/27/1994	Telephone: 916-255-2118
Date Made Active in Reports: 08/02/1994	Last EDR Contact: 05/31/1994
Number of Days to Update: 6	Next Scheduled EDR Contact: N/A
	Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/14/2022	Source: CAL EPA/Office of Emergency Information
Date Data Arrived at EDR: 12/14/2022	Telephone: 916-323-3400
Date Made Active in Reports: 03/07/2023	Last EDR Contact: 03/21/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing

list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 12/07/2021	Source: Livermore-Pleasanton Fire Department
Date Data Arrived at EDR: 05/09/2022	Telephone: 925-454-2361
Date Made Active in Reports: 05/17/2022	Last EDR Contact: 02/10/2023
Number of Days to Update: 8	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 11/17/2022	Source: South Coast Air Quality Management District
Date Data Arrived at EDR: 11/30/2022	Telephone: 909-396-3211
Date Made Active in Reports: 02/14/2023	Last EDR Contact: 02/15/2023
Number of Days to Update: 76	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 08/27/2021	Source: Department of Toxic Substance Control
Date Data Arrived at EDR: 09/01/2021	Telephone: 916-327-4498
Date Made Active in Reports: 11/19/2021	Last EDR Contact: 01/24/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 11/14/2022	Source: Antelope Valley Air Quality Management District
Date Data Arrived at EDR: 11/14/2022	Telephone: 661-723-8070
Date Made Active in Reports: 02/01/2023	Last EDR Contact: 02/23/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2020	Source: California Air Resources Board
Date Data Arrived at EDR: 06/13/2022	Telephone: 916-322-2990
Date Made Active in Reports: 08/30/2022	Last EDR Contact: 03/16/2023
Number of Days to Update: 78	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/10/2023
Date Data Arrived at EDR: 01/18/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 01/18/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/11/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 11/08/2022
Date Data Arrived at EDR: 11/23/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 82

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Varies

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 11/10/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 877-786-9427
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSTATES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 11/10/2022
Date Data Arrived at EDR: 11/10/2022
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 83

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/14/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/03/2023
Date Data Arrived at EDR: 01/04/2023
Date Made Active in Reports: 03/21/2023
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/04/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Quarterly

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2021
Date Data Arrived at EDR: 07/05/2022
Date Made Active in Reports: 09/19/2022
Number of Days to Update: 76

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Annually

MINES: Mines Site Location Listing

A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/02/2022
Date Data Arrived at EDR: 12/02/2022
Date Made Active in Reports: 02/22/2023
Number of Days to Update: 82

Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing

The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 10/31/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/14/2023
Number of Days to Update: 77

Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

NPDES: NPDES Permits Listing

A listing of NPDES permits, including stormwater.

Date of Government Version: 11/03/2022
Date Data Arrived at EDR: 11/03/2022
Date Made Active in Reports: 01/25/2023
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/07/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing

A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/14/2023
Number of Days to Update: 77

Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

PROC: Certified Processors Database

A listing of certified processors.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records

Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 12/07/2022
Date Data Arrived at EDR: 12/07/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 84

Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: No Update Planned

SAN JOSE HAZMAT: Hazardous Material Facilities

Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 11/03/2020
Date Data Arrived at EDR: 11/05/2020
Date Made Active in Reports: 01/26/2021
Number of Days to Update: 82

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Annually

UIC: UIC Listing

A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: Department of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)

Underground control injection sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing

Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 02/11/2021
Date Data Arrived at EDR: 07/01/2021
Date Made Active in Reports: 09/29/2021
Number of Days to Update: 90

Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/17/2023
Data Release Frequency: Varies

WDS: Waste Discharge System

Sites which have been issued waste discharge requirements.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9

Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: No Update Planned

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: No Update Planned

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)

Military privatized sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)

Projects sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing

In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 12/02/2022
Date Data Arrived at EDR: 12/02/2022
Date Made Active in Reports: 02/23/2023
Number of Days to Update: 83

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 11/28/2022
Date Data Arrived at EDR: 11/29/2022
Date Made Active in Reports: 02/13/2023
Number of Days to Update: 76

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 02/28/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/05/2023
Date Data Arrived at EDR: 01/06/2023
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 4

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)

Sampling point - public sites

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)

Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 03/06/2023
Date Data Arrived at EDR: 03/07/2023
Date Made Active in Reports: 03/31/2023
Number of Days to Update: 24

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/07/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Varies

PCS INACTIVE: Listing of Inactive PCS Permits

An inactive permit is a facility that has shut down or is no longer discharging.

Date of Government Version: 11/05/2014
Date Data Arrived at EDR: 01/06/2015
Date Made Active in Reports: 05/06/2015
Number of Days to Update: 120

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MINES MRDS: Mineral Resources Data System Mineral Resources Data System

Date of Government Version: 08/23/2022	Source: USGS
Date Data Arrived at EDR: 11/22/2022	Telephone: 703-648-6533
Date Made Active in Reports: 02/28/2023	Last EDR Contact: 02/24/2023
Number of Days to Update: 98	Next Scheduled EDR Contact: 06/05/2023
	Data Release Frequency: Varies

PCS ENF: Enforcement data No description is available for this data

Date of Government Version: 12/31/2014	Source: EPA
Date Data Arrived at EDR: 02/05/2015	Telephone: 202-564-2497
Date Made Active in Reports: 03/06/2015	Last EDR Contact: 03/30/2023
Number of Days to Update: 29	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

PCS: Permit Compliance System

PCS is a computerized management information system that contains data on National Pollutant Discharge Elimination System (NPDES) permit holding facilities. PCS tracks the permit, compliance, and enforcement status of NPDES facilities.

Date of Government Version: 07/14/2011	Source: EPA, Office of Water
Date Data Arrived at EDR: 08/05/2011	Telephone: 202-564-2496
Date Made Active in Reports: 09/29/2011	Last EDR Contact: 03/30/2023
Number of Days to Update: 55	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Semi-Annually

PFAS TRIS: List of PFAS Added to the TRI

Section 7321 of the National Defense Authorization Act for Fiscal Year 2020 (NDAA) immediately added certain per- and polyfluoroalkyl substances (PFAS) to the list of chemicals covered by the Toxics Release Inventory (TRI) under Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA) and provided a framework for additional PFAS to be added to TRI on an annual basis.

Date of Government Version: 03/07/2023	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/07/2023	Telephone: 202-566-0250
Date Made Active in Reports: 03/24/2023	Last EDR Contact: 03/30/2023
Number of Days to Update: 17	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

HWTS: Hazardous Waste Tracking System

DTSC maintains the Hazardous Waste Tracking System that stores ID number information since the early 1980s and manifest data since 1993. The system collects both manifest copies from the generator and destination facility.

Date of Government Version: 04/05/2022	Source: Department of Toxic Substances Control
Date Data Arrived at EDR: 04/05/2022	Telephone: 916-324-2444
Date Made Active in Reports: 04/26/2022	Last EDR Contact: 04/03/2023
Number of Days to Update: 21	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 12/28/2022
Date Data Arrived at EDR: 12/28/2022
Date Made Active in Reports: 03/17/2023
Number of Days to Update: 79

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List

Cupa Facility List

Date of Government Version: 07/22/2022
Date Data Arrived at EDR: 07/27/2022
Date Made Active in Reports: 08/01/2022
Number of Days to Update: 5

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing

Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing

Cupa Facility Listing

Date of Government Version: 12/13/2022
Date Data Arrived at EDR: 12/15/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 6

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

COLUSA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA COLUSA: CUPA Facility List Cupa facility list.

Date of Government Version: 04/06/2020
Date Data Arrived at EDR: 04/23/2020
Date Made Active in Reports: 07/10/2020
Number of Days to Update: 78

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List

List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 10/20/2022
Date Data Arrived at EDR: 10/21/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 81

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 01/20/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List Cupa Facility list

Date of Government Version: 05/04/2022
Date Data Arrived at EDR: 05/06/2022
Date Made Active in Reports: 07/28/2022
Number of Days to Update: 83

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 02/03/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List CUPA facility list.

Date of Government Version: 08/08/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 09/01/2022
Number of Days to Update: 23

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 01/20/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List

Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 06/28/2021
Date Data Arrived at EDR: 12/21/2021
Date Made Active in Reports: 03/03/2022
Number of Days to Update: 72

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

GLENN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA GLENN: CUPA Facility List Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: No Update Planned

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List CUPA facility list.

Date of Government Version: 08/12/2021
Date Data Arrived at EDR: 08/12/2021
Date Made Active in Reports: 11/08/2021
Number of Days to Update: 88

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List Cupa facility list.

Date of Government Version: 01/13/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

KERN COUNTY:

CUPA KERN: CUPA Facility List A listing of sites included in the Kern County Hazardous Material Business Plan.

Date of Government Version: 10/03/2022
Date Data Arrived at EDR: 10/05/2022
Date Made Active in Reports: 12/16/2022
Number of Days to Update: 72

Source: Kern County Public Health
Telephone: 661-321-3000
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

UST KERN: Underground Storage Tank Sites & Tank Listing Kern County Sites and Tanks Listing.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/03/2022
Date Data Arrived at EDR: 10/05/2022
Date Made Active in Reports: 12/16/2022
Number of Days to Update: 72

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 12/03/2020
Date Data Arrived at EDR: 01/26/2021
Date Made Active in Reports: 04/14/2021
Number of Days to Update: 78

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List

Cupa facility list

Date of Government Version: 11/04/2022
Date Data Arrived at EDR: 11/07/2022
Date Made Active in Reports: 01/25/2023
Number of Days to Update: 79

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 03/10/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List

Cupa facility list

Date of Government Version: 07/31/2020
Date Data Arrived at EDR: 08/21/2020
Date Made Active in Reports: 11/09/2020
Number of Days to Update: 80

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County

San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

HMS LOS ANGELES: HMS: Street Number List

Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 03/29/2023
Next Scheduled EDR Contact: 07/17/2023
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/09/2023
Date Data Arrived at EDR: 01/10/2023
Date Made Active in Reports: 03/23/2023
Number of Days to Update: 72

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 01/10/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills

Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 12/31/2022
Date Data Arrived at EDR: 01/12/2023
Date Made Active in Reports: 03/29/2023
Number of Days to Update: 76

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 01/05/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

LOS ANGELES AST: Active & Inactive AST Inventory

A listing of active & inactive above ground petroleum storage tank site locations, located in the City of Los Angeles.

Date of Government Version: 06/01/2019
Date Data Arrived at EDR: 06/25/2019
Date Made Active in Reports: 08/22/2019
Number of Days to Update: 58

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LOS ANGELES CO LF METHANE: Methane Producing Landfills

This data was created on April 30, 2012 to represent known disposal sites in Los Angeles County that may produce and emanate methane gas. The shapefile contains disposal sites within Los Angeles County that once accepted degradable refuse material. Information used to create this data was extracted from a landfill survey performed by County Engineers (Major Waste System Map, 1973) as well as historical records from CalRecycle, Regional Water Quality Control Board, and Los Angeles County Department of Public Health

Date of Government Version: 01/10/2022
Date Data Arrived at EDR: 01/12/2022
Date Made Active in Reports: 04/04/2022
Number of Days to Update: 82

Source: Los Angeles County Department of Public Works
Telephone: 626-458-6973
Last EDR Contact: 01/05/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: No Update Planned

LOS ANGELES HM: Active & Inactive Hazardous Materials Inventory

A listing of active & inactive hazardous materials facility locations, located in the City of Los Angeles.

Date of Government Version: 11/01/2022
Date Data Arrived at EDR: 12/14/2022
Date Made Active in Reports: 03/07/2023
Number of Days to Update: 83

Source: Los Angeles Fire Department
Telephone: 213-978-3800
Last EDR Contact: 03/24/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LOS ANGELES UST: Active & Inactive UST Inventory

A listing of active & inactive underground storage tank site locations and underground storage tank historical sites, located in the City of Los Angeles.

Date of Government Version: 11/01/2022	Source: Los Angeles Fire Department
Date Data Arrived at EDR: 12/14/2022	Telephone: 213-978-3800
Date Made Active in Reports: 03/07/2023	Last EDR Contact: 03/24/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 07/03/2023
	Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List

Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 05/26/2021	Source: Community Health Services
Date Data Arrived at EDR: 07/09/2021	Telephone: 323-890-7806
Date Made Active in Reports: 09/29/2021	Last EDR Contact: 01/20/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank

Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017	Source: City of El Segundo Fire Department
Date Data Arrived at EDR: 04/19/2017	Telephone: 310-524-2236
Date Made Active in Reports: 05/10/2017	Last EDR Contact: 01/05/2023
Number of Days to Update: 21	Next Scheduled EDR Contact: 04/24/2023
	Data Release Frequency: No Update Planned

UST LONG BEACH: City of Long Beach Underground Storage Tank

Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 04/22/2019	Source: City of Long Beach Fire Department
Date Data Arrived at EDR: 04/23/2019	Telephone: 562-570-2563
Date Made Active in Reports: 06/27/2019	Last EDR Contact: 01/20/2023
Number of Days to Update: 65	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

UST TORRANCE: City of Torrance Underground Storage Tank

Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/18/2022	Source: City of Torrance Fire Department
Date Data Arrived at EDR: 10/19/2022	Telephone: 310-618-2973
Date Made Active in Reports: 01/10/2023	Last EDR Contact: 01/13/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 08/10/2020	Source: Madera County Environmental Health
Date Data Arrived at EDR: 08/12/2020	Telephone: 559-675-7823
Date Made Active in Reports: 10/23/2020	Last EDR Contact: 02/09/2023
Number of Days to Update: 72	Next Scheduled EDR Contact: 05/29/2023
	Data Release Frequency: Varies

MARIN COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29

Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Semi-Annually

MENDOCINO COUNTY:

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 09/22/2021
Date Data Arrived at EDR: 11/18/2021
Date Made Active in Reports: 11/22/2021
Number of Days to Update: 4

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/15/2022
Date Data Arrived at EDR: 02/17/2022
Date Made Active in Reports: 05/11/2022
Number of Days to Update: 83

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/22/2021
Date Data Arrived at EDR: 03/02/2021
Date Made Active in Reports: 05/19/2021
Number of Days to Update: 78

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 10/04/2021
Date Data Arrived at EDR: 10/06/2021
Date Made Active in Reports: 12/29/2021
Number of Days to Update: 84

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Varies

NAPA COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST NAPA: Sites With Reported Contamination

A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites

Underground storage tank sites located in Napa county.

Date of Government Version: 09/05/2019
Date Data Arrived at EDR: 09/09/2019
Date Made Active in Reports: 10/31/2019
Number of Days to Update: 52

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List

CUPA facility list.

Date of Government Version: 10/27/2022
Date Data Arrived at EDR: 10/27/2022
Date Made Active in Reports: 01/18/2023
Number of Days to Update: 83

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 01/20/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups

Petroleum and non-petroleum spills.

Date of Government Version: 05/24/2022
Date Data Arrived at EDR: 08/09/2022
Date Made Active in Reports: 10/28/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups

Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 04/08/2022
Date Data Arrived at EDR: 05/18/2022
Date Made Active in Reports: 08/03/2022
Number of Days to Update: 77

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities

Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/24/2022
Date Data Arrived at EDR: 08/01/2022
Date Made Active in Reports: 10/20/2022
Number of Days to Update: 80

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 01/31/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Quarterly

PLACER COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

MS PLACER: Master List of Facilities

List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 08/26/2022
Date Data Arrived at EDR: 08/29/2022
Date Made Active in Reports: 11/15/2022
Number of Days to Update: 78

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/13/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List

Plumas County CUPA Program facilities.

Date of Government Version: 03/31/2019
Date Data Arrived at EDR: 04/23/2019
Date Made Active in Reports: 06/26/2019
Number of Days to Update: 64

Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites

Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 01/18/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List

Underground storage tank sites located in Riverside county.

Date of Government Version: 01/18/2023
Date Data Arrived at EDR: 01/19/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 75

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/09/2023
Next Scheduled EDR Contact: 06/26/2023
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List

List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/21/2022
Date Made Active in Reports: 03/16/2023
Number of Days to Update: 85

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List

Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2022
Date Data Arrived at EDR: 12/09/2022
Date Made Active in Reports: 03/01/2023
Number of Days to Update: 82

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 03/30/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN BENITO: CUPA Facility List

Cupa facility list

Date of Government Version: 10/27/2022

Date Data Arrived at EDR: 10/28/2022

Date Made Active in Reports: 01/18/2023

Number of Days to Update: 82

Source: San Benito County Environmental Health

Telephone: N/A

Last EDR Contact: 01/27/2023

Next Scheduled EDR Contact: 05/15/2023

Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits

This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 11/18/2022

Date Data Arrived at EDR: 11/21/2022

Date Made Active in Reports: 02/09/2023

Number of Days to Update: 80

Source: San Bernardino County Fire Department Hazardous Materials Division

Telephone: 909-387-3041

Last EDR Contact: 01/30/2023

Next Scheduled EDR Contact: 05/15/2023

Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 11/28/2022

Date Data Arrived at EDR: 11/29/2022

Date Made Active in Reports: 02/14/2023

Number of Days to Update: 77

Source: Hazardous Materials Management Division

Telephone: 619-338-2268

Last EDR Contact: 02/28/2023

Next Scheduled EDR Contact: 06/12/2023

Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/27/2021

Date Data Arrived at EDR: 03/04/2022

Date Made Active in Reports: 05/31/2022

Number of Days to Update: 88

Source: Department of Health Services

Telephone: 619-338-2209

Last EDR Contact: 04/04/2023

Next Scheduled EDR Contact: 05/01/2023

Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 07/22/2021

Date Data Arrived at EDR: 10/19/2021

Date Made Active in Reports: 01/13/2022

Number of Days to Update: 86

Source: Department of Environmental Health

Telephone: 858-505-6874

Last EDR Contact: 01/13/2023

Next Scheduled EDR Contact: 05/01/2023

Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

SAN DIEGO CO SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010	Source: San Diego County Department of Environmental Health
Date Data Arrived at EDR: 06/15/2010	Telephone: 619-338-2371
Date Made Active in Reports: 07/09/2010	Last EDR Contact: 02/23/2023
Number of Days to Update: 24	Next Scheduled EDR Contact: 06/12/2023
	Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

CUPA SAN FRANCISCO CO: CUPA Facility Listing

Cupa facilities

Date of Government Version: 11/03/2022	Source: San Francisco County Department of Environmental Health
Date Data Arrived at EDR: 11/07/2022	Telephone: 415-252-3896
Date Made Active in Reports: 01/25/2023	Last EDR Contact: 01/27/2023
Number of Days to Update: 79	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Varies

LUST SAN FRANCISCO: Local Oversight Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008	Source: Department Of Public Health San Francisco County
Date Data Arrived at EDR: 09/19/2008	Telephone: 415-252-3920
Date Made Active in Reports: 09/29/2008	Last EDR Contact: 01/27/2023
Number of Days to Update: 10	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: No Update Planned

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/03/2022	Source: Department of Public Health
Date Data Arrived at EDR: 11/07/2022	Telephone: 415-252-3920
Date Made Active in Reports: 01/24/2023	Last EDR Contact: 01/27/2023
Number of Days to Update: 78	Next Scheduled EDR Contact: 05/15/2023
	Data Release Frequency: Quarterly

SAN FRANCISCO COUNTY:

SAN FRANCISCO MAHER: Maher Ordinance Property Listing

a listing of properties that fall within a Maher Ordinance, for all of San Francisco

Date of Government Version: 10/11/2022	Source: San Francisco Planning
Date Data Arrived at EDR: 10/14/2022	Telephone: 628-652-7483
Date Made Active in Reports: 01/04/2023	Last EDR Contact: 01/13/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/01/2023
	Data Release Frequency: Varies

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST

A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018	Source: Environmental Health Department
Date Data Arrived at EDR: 06/26/2018	Telephone: N/A
Date Made Active in Reports: 07/11/2018	Last EDR Contact: 03/09/2023
Number of Days to Update: 15	Next Scheduled EDR Contact: 06/26/2023
	Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA SAN LUIS OBISPO: CUPA Facility List Cupa Facility List.

Date of Government Version: 11/08/2022
Date Data Arrived at EDR: 11/09/2022
Date Made Active in Reports: 02/01/2023
Number of Days to Update: 64

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory

List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 02/20/2020
Date Data Arrived at EDR: 02/20/2020
Date Made Active in Reports: 04/24/2020
Number of Days to Update: 64

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/10/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List

A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 03/29/2019
Date Data Arrived at EDR: 03/29/2019
Date Made Active in Reports: 05/29/2019
Number of Days to Update: 61

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/02/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing

CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: No Update Planned

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List

Cupa facility list

Date of Government Version: 10/28/2022
Date Data Arrived at EDR: 11/01/2022
Date Made Active in Reports: 01/20/2023
Number of Days to Update: 80

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report

A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

LUST SANTA CLARA: LOP Listing

A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/15/2023
Next Scheduled EDR Contact: 06/05/2023
Data Release Frequency: No Update Planned

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/09/2023
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks

A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/04/2019
Date Data Arrived at EDR: 06/06/2019
Date Made Active in Reports: 08/13/2019
Number of Days to Update: 68

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks

Underground storage tank sites located in Solano county.

Date of Government Version: 09/15/2021
Date Data Arrived at EDR: 09/16/2021
Date Made Active in Reports: 12/09/2021
Number of Days to Update: 84

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List Cupa Facility list

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 07/02/2021
Date Data Arrived at EDR: 07/06/2021
Date Made Active in Reports: 07/14/2021
Number of Days to Update: 8

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 06/28/2021
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites

A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 06/30/2021
Date Data Arrived at EDR: 06/30/2021
Date Made Active in Reports: 09/24/2021
Number of Days to Update: 86

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 03/16/2023
Next Scheduled EDR Contact: 07/03/2023
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List

Cupa facility list

Date of Government Version: 02/08/2022
Date Data Arrived at EDR: 02/10/2022
Date Made Active in Reports: 05/04/2022
Number of Days to Update: 83

Source: Stanislaus County Department of Environmental Protection
Telephone: 209-525-6751
Last EDR Contact: 01/09/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks

Underground storage tank sites located in Sutter county.

Date of Government Version: 08/03/2022
Date Data Arrived at EDR: 08/25/2022
Date Made Active in Reports: 11/14/2022
Number of Days to Update: 81

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/23/2023
Next Scheduled EDR Contact: 06/12/2023
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List

Cupa facilities

Date of Government Version: 11/17/2022
Date Data Arrived at EDR: 11/21/2022
Date Made Active in Reports: 02/10/2023
Number of Days to Update: 81

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List

Cupa facility list

Date of Government Version: 01/13/2023
Date Data Arrived at EDR: 01/17/2023
Date Made Active in Reports: 04/04/2023
Number of Days to Update: 77

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

TULARE COUNTY:

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CUPA TULARE: CUPA Facility List Cupa program facilities

Date of Government Version: 10/07/2022
Date Data Arrived at EDR: 10/07/2022
Date Made Active in Reports: 12/21/2022
Number of Days to Update: 75

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/15/2023
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 01/13/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 09/26/2022
Date Data Arrived at EDR: 10/19/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 83

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/22/2023
Next Scheduled EDR Contact: 07/10/2023
Data Release Frequency: No Update Planned

LUST VENTURA: Listing of Underground Tank Cleanup Sites Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/02/2023
Next Scheduled EDR Contact: 05/22/2023
Data Release Frequency: No Update Planned

MED WASTE VENTURA: Medical Waste Program List To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 09/26/2022
Date Data Arrived at EDR: 10/20/2022
Date Made Active in Reports: 01/10/2023
Number of Days to Update: 82

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 01/17/2023
Next Scheduled EDR Contact: 05/01/2023
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

UST VENTURA: Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 11/28/2022	Source: Environmental Health Division
Date Data Arrived at EDR: 12/02/2022	Telephone: 805-654-2813
Date Made Active in Reports: 02/23/2023	Last EDR Contact: 03/07/2023
Number of Days to Update: 83	Next Scheduled EDR Contact: 06/19/2023
	Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 12/19/2022	Source: Yolo County Department of Health
Date Data Arrived at EDR: 12/27/2022	Telephone: 530-666-8646
Date Made Active in Reports: 03/17/2023	Last EDR Contact: 03/22/2023
Number of Days to Update: 80	Next Scheduled EDR Contact: 07/10/2023
	Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List

CUPA facility listing for Yuba County.

Date of Government Version: 10/25/2022	Source: Yuba County Environmental Health Department
Date Data Arrived at EDR: 10/26/2022	Telephone: 530-749-7523
Date Made Active in Reports: 10/31/2022	Last EDR Contact: 01/20/2023
Number of Days to Update: 5	Next Scheduled EDR Contact: 05/08/2023
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data

Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 11/16/2022	Source: Department of Energy & Environmental Protection
Date Data Arrived at EDR: 11/16/2022	Telephone: 860-424-3375
Date Made Active in Reports: 02/06/2023	Last EDR Contact: 02/10/2023
Number of Days to Update: 82	Next Scheduled EDR Contact: 05/22/2023
	Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 12/31/2018	Source: Department of Environmental Protection
Date Data Arrived at EDR: 04/10/2019	Telephone: N/A
Date Made Active in Reports: 05/16/2019	Last EDR Contact: 03/30/2023
Number of Days to Update: 36	Next Scheduled EDR Contact: 07/17/2023
	Data Release Frequency: Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NY MANIFEST: Facility and Manifest Data

Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 10/29/2021
Date Made Active in Reports: 01/19/2022
Number of Days to Update: 82

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/27/2023
Next Scheduled EDR Contact: 05/08/2023
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 06/30/2018
Date Data Arrived at EDR: 07/19/2019
Date Made Active in Reports: 09/10/2019
Number of Days to Update: 53

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 01/06/2023
Next Scheduled EDR Contact: 04/24/2023
Data Release Frequency: Annually

RI MANIFEST: Manifest information

Hazardous waste manifest information

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 11/30/2021
Date Made Active in Reports: 02/18/2022
Number of Days to Update: 80

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/13/2022
Next Scheduled EDR Contact: 05/29/2023
Data Release Frequency: Annually

WI MANIFEST: Manifest Information

Hazardous waste manifest information.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 06/19/2019
Date Made Active in Reports: 09/03/2019
Number of Days to Update: 76

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/06/2023
Next Scheduled EDR Contact: 06/19/2023
Data Release Frequency: Annually

Oil/Gas Pipelines

Source: Endeavor Business Media

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by Endeavor Business Media. This information is provided on a best effort basis and Endeavor Business Media does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of Endeavor Business Media.

Electric Power Transmission Line Data

Source: Endeavor Business Media

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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.
Telephone: 312-280-5991

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities

Source: Department of Social Services

Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK[®] - PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

NOT REPORTED
NOT REPORTED
SEASIDE, CA 93955

TARGET PROPERTY COORDINATES

Latitude (North): 36.644761 - 36° 38' 41.14"
Longitude (West): 121.814101 - 121° 48' 50.76"
Universal Transverse Mercator: Zone 10
UTM X (Meters): 606010.2
UTM Y (Meters): 4055918.2
Elevation: 173 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map: 12021485 MARINA, CA
Version Date: 2018

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

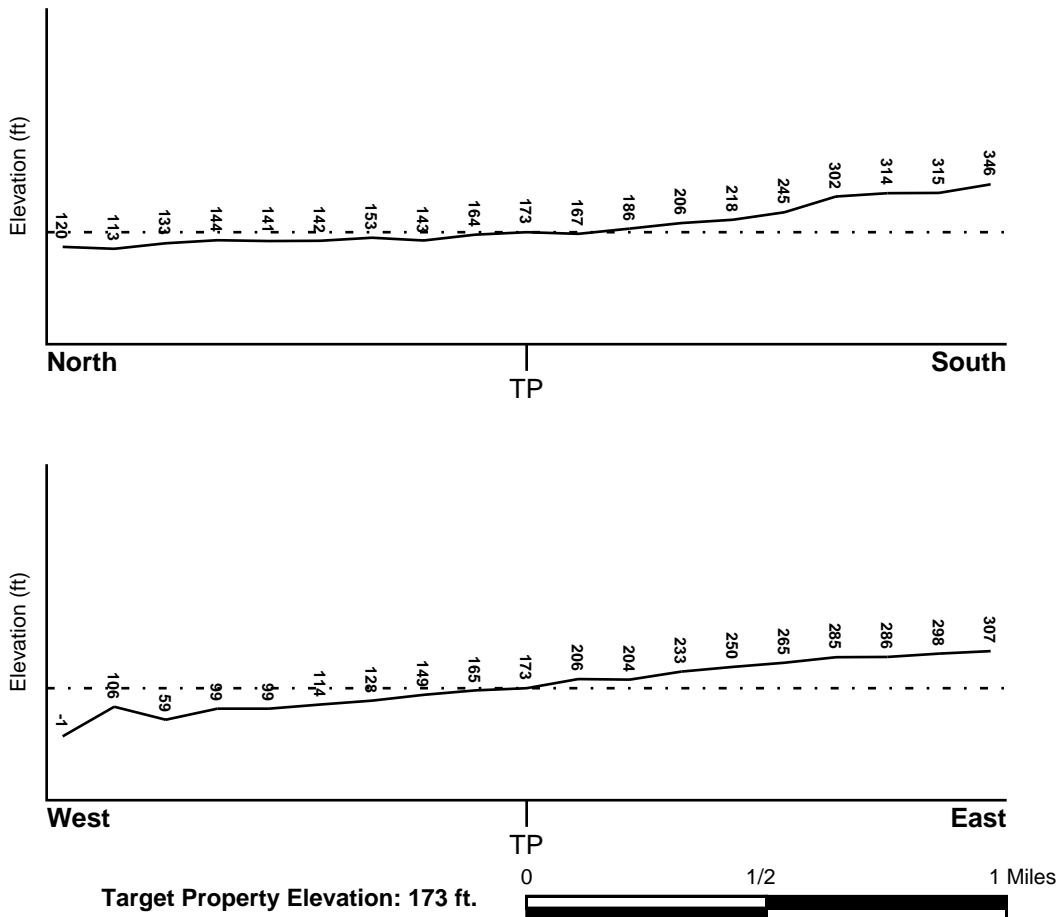
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General WNW

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

<u>Flood Plain Panel at Target Property</u>	<u>FEMA Source Type</u>
06053C0190G	FEMA FIRM Flood data
<u>Additional Panels in search area:</u>	<u>FEMA Source Type</u>
06053C0195G	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

<u>NWI Quad at Target Property</u>	<u>NWI Electronic Data Coverage</u>
MARINA	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

<u>MAP ID</u>	<u>LOCATION FROM TP</u>	<u>GENERAL DIRECTION GROUNDWATER FLOW</u>
Not Reported		

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

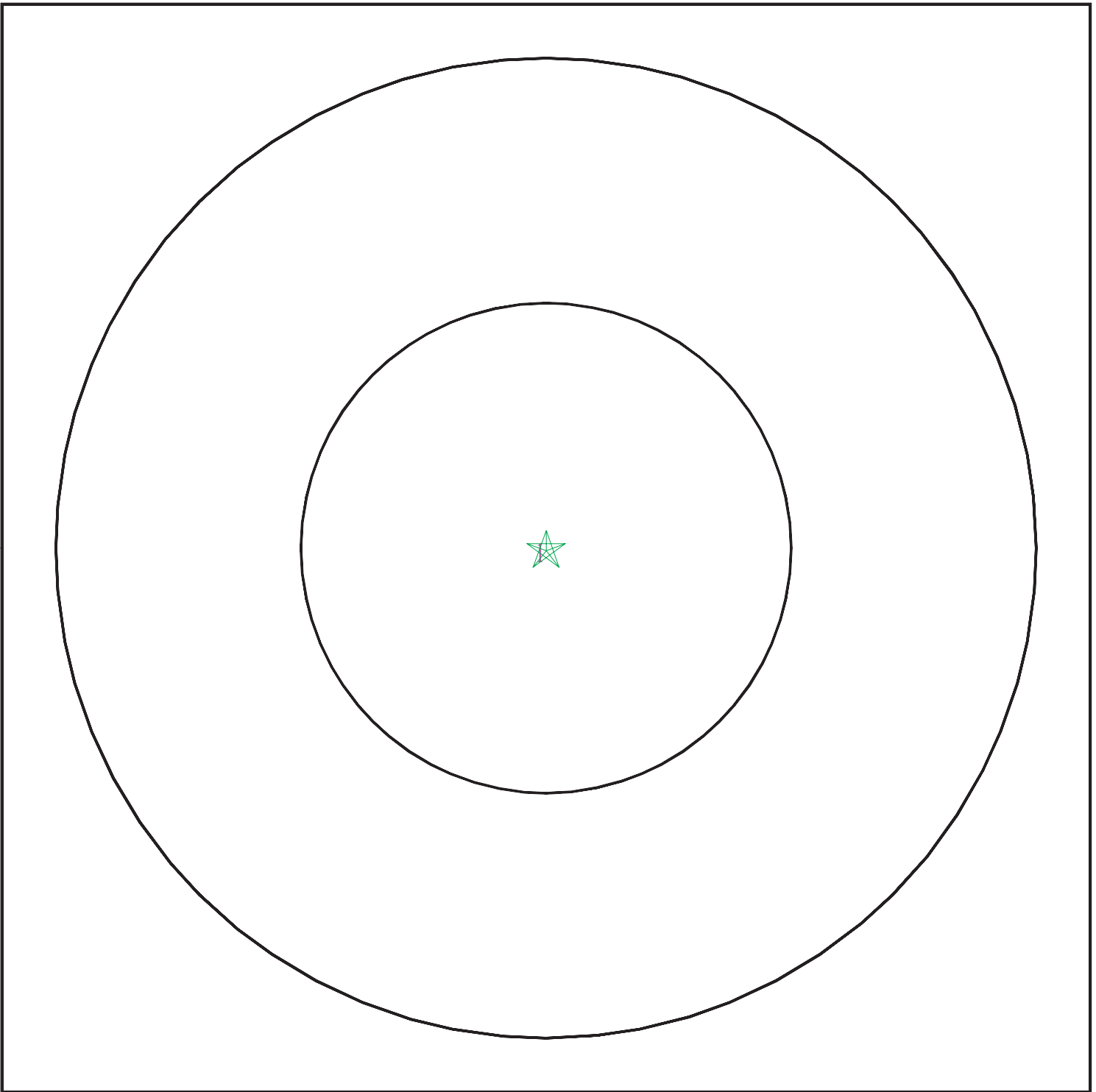
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q (<i>decoded above as Era, System & Series</i>)

GEOLOGIC AGE IDENTIFICATION

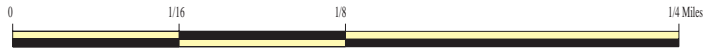
Category: Stratified Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 7299418.2s



- ★ Target Property
- ∩ SSURGO Soil
- ∩ Water



SITE NAME: Not Reported
ADDRESS: Not Reported
Seaside CA 93955
LAT/LONG: 36.644761 / 121.814101

CLIENT: Kimley Horn & Associates, Inc.
CONTACT: Kiana Graham
INQUIRY #: 7299418.2s
DATE: April 05, 2023 9:49 am

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: Oceano

Soil Surface Texture: loamy sand

Hydrologic Group: Class A - High infiltration rates. Soils are deep, well drained to excessively drained sands and gravels.

Soil Drainage Class: Excessively drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
Layer	Boundary		Soil Texture Class	Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
	Upper	Lower		AASHTO Group	Unified Soil		
1	0 inches	79 inches	loamy sand	Not reported	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 141 Min: 42	Max: 6.5 Min: 5.1

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

<u>DATABASE</u>	<u>SEARCH DISTANCE (miles)</u>
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 1 mile
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No Wells Found		

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

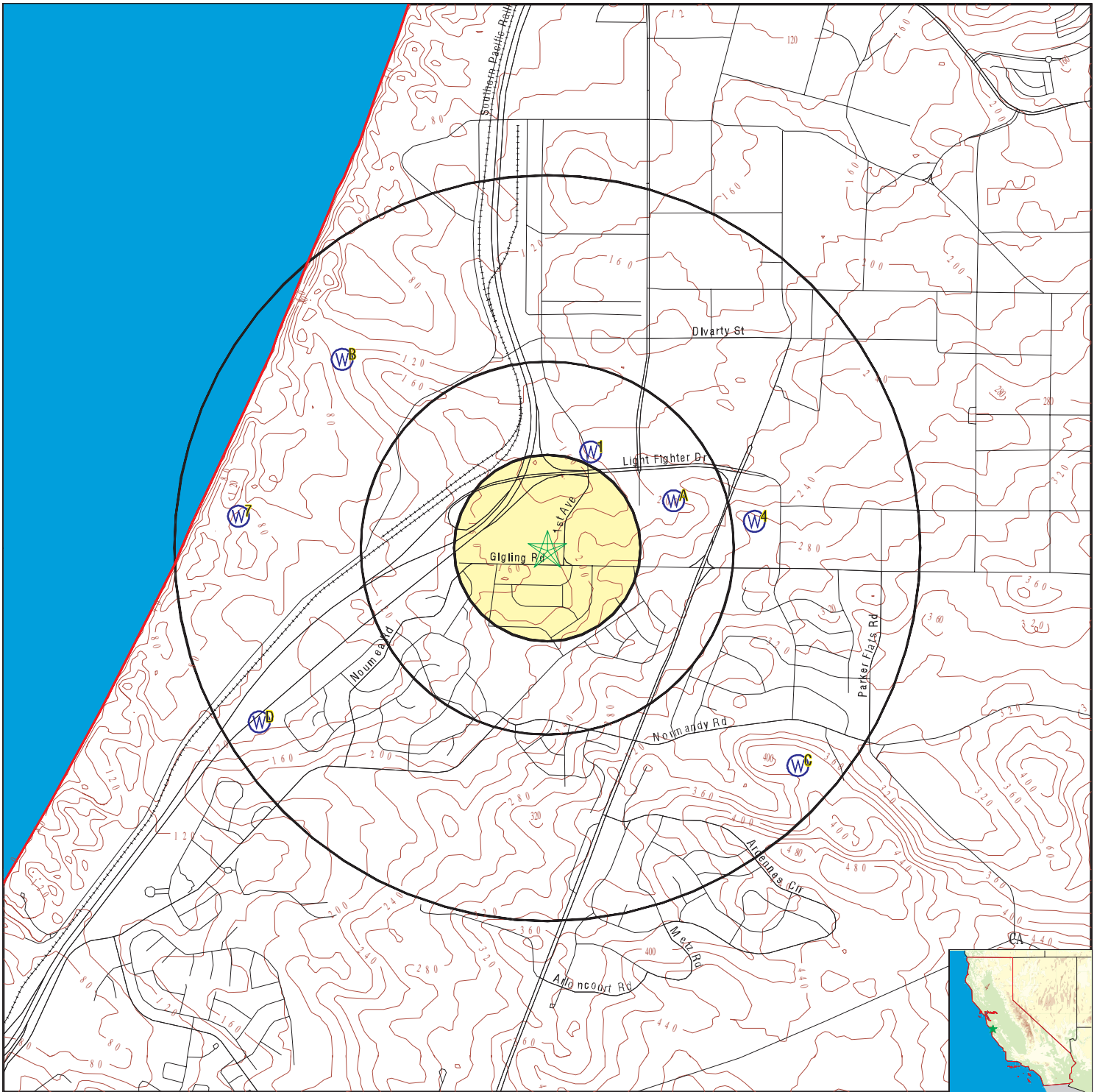
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

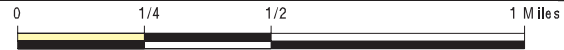
<u>MAP ID</u>	<u>WELL ID</u>	<u>LOCATION FROM TP</u>
1	CADWR9000029017	1/4 - 1/2 Mile NNE
A2	CADWR9000028929	1/4 - 1/2 Mile ENE
A3	CADWR9000028928	1/4 - 1/2 Mile ENE
4	CAEDF0000041483	1/2 - 1 Mile East
B5	CADWR9000029046	1/2 - 1 Mile NW
B6	CADWR9000029047	1/2 - 1 Mile NW
7	CADWR9000028923	1/2 - 1 Mile West
C8	CADWR9000028834	1/2 - 1 Mile SE
C9	CADWR9000028835	1/2 - 1 Mile SE
D10	CADWR9000028841	1/2 - 1 Mile WSW
D11	CADWR9000028842	1/2 - 1 Mile WSW

PHYSICAL SETTING SOURCE MAP - 7299418.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons

- Groundwater Flow Direction
- Indeterminate Groundwater Flow at Location
- Groundwater Flow Varies at Location
- Closest Hydrogeological Data
- Oil, gas or related wells



SITE NAME: Not Reported
 ADDRESS: Not Reported
 Seaside CA 93955
 LAT/LONG: 36.644761 / 121.814101

CLIENT: Kimley Horn & Associates, Inc.
 CONTACT: Kiana Graham
 INQUIRY #: 7299418.2s
 DATE: April 05, 2023 9:49 am

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

1
NNE
1/4 - 1/2 Mile
Higher **CA WELLS CADWR9000029017**

State Well #:	Not Reported	Station ID:	51518
Well Name:	MW-BW-22-180	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

A2
ENE
1/4 - 1/2 Mile
Higher **CA WELLS CADWR9000028929**

State Well #:	Not Reported	Station ID:	46753
Well Name:	MPWMD #FO-10-Deep	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	1420	Well Completion Rpt #:	442738

A3
ENE
1/4 - 1/2 Mile
Higher **CA WELLS CADWR9000028928**

State Well #:	Not Reported	Station ID:	46752
Well Name:	MPWMD #FO-10-Shallow	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	650	Well Completion Rpt #:	442738

4
East
1/2 - 1 Mile
Higher **CA WELLS CAEDF0000041483**

Well ID:	L10006198832-MW-10-04-180	Well Type:	MONITORING
Source:	EDF	Other Name:	MW-10-04-180
GAMA PFAS Testing:	Not Reported		
Groundwater Quality Data:	https://gamagroundwater.waterboards.ca.gov/gama/gamamap/public/GamaDataDisplay.asp?dataset=EDF&samp_date=&global_id=L10006198832&assigned_name=MW-10-04-180&store_num=		
GeoTracker Data:	https://geotracker.waterboards.ca.gov/profile_report.asp?cmd=MWEDFResults&global_id=L10006198832&assigned_name=MW-10-04-180		

B5
NW
1/2 - 1 Mile
Lower **CA WELLS CADWR9000029046**

State Well #:	Not Reported	Station ID:	47429
Well Name:	CDM MW-1 Beach	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	140	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation

Database EDR ID Number

B6
NW
1/2 - 1 Mile
Lower

CA WELLS CADWR9000029047

State Well #:	Not Reported	Station ID:	51511
Well Name:	Sentinel MW #1	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

7
West
1/2 - 1 Mile
Lower

CA WELLS CADWR9000028923

State Well #:	Not Reported	Station ID:	51512
Well Name:	Sentinel MW #2	Basin Name:	Seaside
Well Use:	Observation	Well Type:	Single Well
Well Depth:	0	Well Completion Rpt #:	Not Reported

C8
SE
1/2 - 1 Mile
Higher

CA WELLS CADWR9000028834

State Well #:	Not Reported	Station ID:	47267
Well Name:	MPWMD #FO-08-Shallow	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	790	Well Completion Rpt #:	Not Reported

C9
SE
1/2 - 1 Mile
Higher

CA WELLS CADWR9000028835

State Well #:	Not Reported	Station ID:	47268
Well Name:	MPWMD #FO-08-Deep	Basin Name:	Monterey
Well Use:	Observation	Well Type:	Single Well
Well Depth:	950	Well Completion Rpt #:	Not Reported

D10
WSW
1/2 - 1 Mile
Lower

CA WELLS CADWR9000028841

State Well #:	Not Reported	Station ID:	46750
Well Name:	MPWMD #FO-09-Shallow	Basin Name:	Seaside
Well Use:	Observation	Well Type:	Single Well
Well Depth:	660	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
 Direction
 Distance
 Elevation

Database EDR ID Number

D11
WSW
1/2 - 1 Mile
Lower

CA WELLS CADWR9000028842

State Well #:	Not Reported	Station ID:	46751
Well Name:	MPWMD #FO-09-Deep	Basin Name:	Seaside
Well Use:	Observation	Well Type:	Single Well
Well Depth:	840	Well Completion Rpt #:	Not Reported

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
93955	85	0

Federal EPA Radon Zone for MONTEREY County: 2

- Note: Zone 1 indoor average level > 4 pCi/L.
 : Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
 : Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for Zip Code: 93955

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.450 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)

Source: United States Geologic Survey

EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map

Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.

Source: FEMA

Telephone: 877-336-2627

Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005, 2010 and 2015 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory

Source: Department of Fish and Wildlife

Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^R Information System

Source: EDR proprietary database of groundwater flow information

EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit

Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database

Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)

Telephone: 800-672-5559

SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: 202-564-3750

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

OTHER STATE DATABASE INFORMATION

Groundwater Ambient Monitoring & Assessment Program

State Water Resources Control Board

Telephone: 916-341-5577

The GAMA Program is California's comprehensive groundwater quality monitoring program. GAMA collects data by testing the untreated, raw water in different types of wells for naturally-occurring and man-made chemicals. The GAMA data includes Domestic, Monitoring and Municipal well types from the following sources, Department of Water Resources, Department of Health Services, EDF, Agricultural Lands, Lawrence Livermore National Laboratory, Department of Pesticide Regulation, United States Geological Survey, Groundwater Ambient Monitoring and Assessment Program and Local Groundwater Projects.

Water Well Database

Source: Department of Water Resources

Telephone: 916-651-9648

California Drinking Water Quality Database

Source: Department of Public Health

Telephone: 916-324-2319

The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

California Oil and Gas Well Locations

Source: Dept of Conservation, Geologic Energy Management Division

Telephone: 916-323-1779

Oil and Gas well locations in the state.

California Earthquake Fault Lines

Source: California Division of Mines and Geology

The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon

Source: Department of Public Health

Telephone: 916-210-8558

Radon Database for California

PHYSICAL SETTING SOURCE RECORDS SEARCHED

Area Radon Information

Source: USGS

Telephone: 703-356-4020

The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones

Source: EPA

Telephone: 703-356-4020

Sections 307 & 309 of IRRA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities

Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater

Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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Appendix E Historical Records

Appendix F Historical Records



REPLY TO
ATTENTION OF

DAIM-BD-H

DEPARTMENT OF THE ARMY
HAMPTON FIELD OFFICE, ARMY BASE REALIGNMENT AND CLOSURE
3A BERNARD ROAD
FORT MONROE VIRGINIA 23651

August 15, 2005

MEMORANDUM FOR: Assistant Chief of Staff for Installation Management, 600 Army
Pentagon, Washington, D.C. 20310-0600

SUBJECT: Finding of Suitability to Transfer (FOST) 9 at Former Fort Ord

1. Enclosed for your records: FOST 9 to transfer approximately 1,894 acres at the Former Fort Ord. The document received Installation, Regulatory, Public, and Hampton Field Office legal and environmental review. It is signed by the Director of the BRAC-Hampton Field Office.
2. Hampton Field Office point of contact is Ms. Judy Johnston, DSN: 680-3845 or Commercial (757) 788-3845.

Enclosure

A handwritten signature in black ink that reads "Thomas E. Lederle".

THOMAS E. LEDERLE
Director, Base Realignment and Closure
Hampton Field Office

CF: (w/encl)
HQDA (DAIM-BD)
CDR, USACE (CESPK-RE-M, Liz Easley)
DAIM-BD-OR (Karen Fisbeck)

For ECP Category 2 Parcels:

The portion of the Property in ECP Category 2 has been identified as real property on which no hazardous substances were released or disposed of, but on which petroleum products or their derivatives are known to have been released or disposed of. Notice is hereby provided that diesel fuel was released from a 4,000-gallon underground storage tank on the Property, which was operated from approximately 1976 to 1990.

Based on the above information, I conclude that all response actions necessary to protect human health and the environment with respect to any petroleum product remaining on the Property have been taken prior to the date of this conveyance. In addition, all Department of Defense (DOD) requirements to reach a Finding of Suitability to Transfer have been met for the Property, subject to the terms and conditions set forth in the Environmental Protection Provisions (Attachment 5) that shall be included in the deed for the Property. The deed will also include the Notice of Release or Disposal of Petroleum Products, Covenant, and Access Provisions and Other Deed Provisions, including a clause granting the US EPA and the DTSC access to the Property in any case in which a response or corrective action is found to be necessary after the date of transfer. Finally, the petroleum product notification (Table 7 – Notification of Petroleum Product Storage, Release, or Disposal [Attachment 3]) shall be included in the deed as required under DOD FOST Guidance.

For ECP Category 3 and 4 Parcels:

Based on the above information, I conclude that all removal or remedial actions necessary to protect human health and the environment have been taken and the portion of the Property in ECP Categories 3 and 4 is transferable under CERCLA section 120(h)(3). In addition, all Department of Defense requirements to reach a Finding of Suitability to Transfer have been met for the Property, subject to the terms and conditions set forth in the Environmental Protection Provisions (Attachment 5) that shall be included in the deed for the Property. The deed will also include the CERCLA 120(h)(3) Notice, Covenant, and Access Provisions and Other Deed Provisions, including a clause granting the US EPA and the DTSC access to the Property in any case in which a response or corrective action is found to be necessary after the date of transfer. Finally, the hazardous substance notification (Table 6 – Notification of Hazardous Substance Storage, Release, or Disposal [Attachment 3]) shall be included in the deed as required under the CERCLA Section 120(h) and DOD FOST Guidance.

AUG 15 2005



Thomas E. Lederle
Director, Hampton Field Office
Army BRAC

AUG 11 2005



Jared Blumenfeld
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D., Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Gavin Newsom
Governor

July 10, 2020

Ms. Angeles Herrera
Assistant Director
Federal Facilities and Site Cleanup Branch, EPA Region 9
75 Hawthorne Street (MC: SFD-8)
San Francisco, California 94105

CONCURRENCE WITH THE PROPOSED PARTIAL DELETION OF PROPERTIES AT THE FORT ORD SUPERFUND SITE FROM THE NATIONAL PRIORITIES LIST

Dear Ms. Herrera:

The Department of Toxic Substances Control (DTSC) has reviewed the Remedial Action Summary Report, Fort Ord, California dated June 2020.

The U.S. Army identified 13,394 acres of the 27,827 acres at the Fort Ord Superfund Site where all appropriate response actions have been implemented to remediate groundwater and soil contamination, as well as explosive safety hazards presented by military munitions, to protect human health and the environment. DTSC concurs with the Army's evaluation of these properties. As with any remediation, if previously unidentified contamination is discovered at the properties, additional assessment, investigation, and/or cleanup may be required.

We understand the U.S. Environmental Protection Agency is prepared to proceed with deletion of these remediated properties from the National Priorities List (NPL). DTSC concurs with the proposed deletion of the 13,394 acres from the NPL, as identified in the Remedial Action Summary Report.

Ms. Angeles Herrera
July 10, 2020
Page 2

DTSC appreciates the opportunity to participate in this important decision. If you have any questions, please contact Brett Leary, at (916) 255-4988, or at Brett.Leary@dtsc.ca.gov, or Min Wu, at (916) 255-3621, or at Min.Wu@dtsc.ca.gov.

Sincerely,

Charlie Ridenour
Branch Chief
Site Mitigation and Restoration Program
Department of Toxic Substances Control

cc: (Via email)

Ms. Maeve Clancy
U.S. Environmental Protection Agency, Region 9
Clancy.Maeve@epa.gov

Ms. Suzanne Pyatt
U.S. Environmental Protection Agency, Region 9
Pyatt.Suzanne@epa.gov

Mr. William Collins
Fort Ord Base Realignment and Closure Office
William.K.Collins.civ@mail.mil

Mr. Jay Cross, Senior Staff Counsel – DTSC
Jay.Cross@dtsc.ca.gov

Mr. Roman A. Racca, P.G., Sr. E.G. – DTSC
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Mr. Noel Shrum, Unit Chief – DTSC
Noel.Shrum@dtsc.ca.gov

Mr. Brett Leary, Project Manager – DTSC
Brett.Leary@dtsc.ca.gov

Mr. Min Wu, Ph.D. – DTSC
Min.Wu@dtsc.ca.gov

Remedial Action Summary Report Fort Ord, California

June 2020

Prepared for

U.S. Department of the Army
Base Realignment and Closure
Fort Ord Field Office

Prepared by

U.S. Army Corps of Engineers
Sacramento District

Remedial Action Summary Report

Fort Ord, California

June 2020

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1. Introduction and Overview

The purpose of this Remedial Action (RA) Summary Report is to provide information to support partial deletion of the Fort Ord Superfund Site in California, from the National Priorities List (NPL). The report is provided to U.S. Environmental Protection Agency (EPA) to develop a basis for partial site deletion.

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425(e), sites may be deleted from the NPL where no further response is appropriate. In making such a determination pursuant to 40 CFR 300.425(e), EPA will consider, in consultation with the State, whether any of the following criteria have been met:

- i. responsible parties or other persons have implemented all appropriate response actions required;
- ii. all appropriate Fund-financed response under CERCLA has been implemented, and no further response action by responsible parties is appropriate; or
- iii. the remedial investigation has shown that the release poses no significant threat to public health or the environment and, therefore, the taking of remedial measures is not appropriate.

Fort Ord, California, was placed on the NPL by EPA on February 21, 1990, 55 Federal Register at page 6154. The EPA site identification number is CA7210020676. United States Department of the Army (Army) Base Realignment and Closure (BRAC) has identified portions of the Fort Ord Superfund Site where the Army has implemented all appropriate response actions required under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended. This RA Summary Report describes the completed RAs to support deletion of portions of the Fort Ord Superfund Site from the NPL. This RA Summary Report was prepared consistent with *Close Out Procedures for National Priorities List Sites* (EPA, 2011) and other guidance. Parcels identified for partial deletion are listed in Table 2 and shown in Figure 2. A list of acronyms is provided in Appendix A. An Administrative Record Index is provided in the docket.

As required under CERCLA Section 120, the Army, EPA, California Department of Health Services (now represented by California Department of Toxic Substances Control [DTSC]), and California Regional Water Quality Control Board (RWQCB) Central Coast Region entered into a Federal Facility Agreement (FFA) for Fort Ord, which became effective on November 19, 1990 (Army, et al., 1990). Under the 1990 FFA, the Army was designated as the lead agency, and EPA, DTSC, and RWQCB were established as regulatory agencies for the Superfund process at Fort Ord. The signatories to the 1990 FFA make up the Fort Ord BRAC Cleanup Team (BCT). The RAs were conducted by the Army based on the 1990 FFA.

Following the base closure decision in 1991, the Army began investigating and conducting removal actions to address explosives safety hazards associated with munitions and explosives of concern (MEC), including unexploded ordnance (UXO). In April 2000, an agreement was signed between the Army, EPA, and DTSC to evaluate military munitions and perform military munitions response activities at the former Fort Ord subject to the provisions of the Fort Ord FFA. The Munitions Response Remedial Investigation/Feasibility Study (RI/FS) program was initiated in 1998.

In 2007, the Army and Fort Ord Reuse Authority (FORA) entered into an Environmental Services Cooperative Agreement (ESCA) (Army, 2007a), under which the Army provided funds

for FORA to conduct all response actions (except for those responsibilities the Army has retained) and to obtain regulatory closure for an approximately 3,300 acres of the former Fort Ord. An Administrative Order on Consent (AOC) was entered into by FORA, EPA, and DTSC for oversight of environmental response actions by FORA under the ESCA. The effective date for the AOC was July 25, 2008 (EPA et al., 2008). The AOC (which continues to be in effect) concerns the preparation and performance by FORA of potential removal actions, Remedial Investigations (RIs) and Feasibility Studies (FSs), and remedial designs (RDs) and RAs for MEC present on portions of the former Fort Ord, and the reimbursement for future response costs incurred by EPA and DTSC in connection with such CERCLA response actions. Under the AOC, FORA is also responsible for providing information to the public explaining activities at the former Fort Ord being performed under the AOC. The underlying properties were transferred to FORA in 2009 under the Early Transfer authority. Amendment No. 1 to the FFA effective July 26, 2007 (Army et al., 2007) reflects FORA's assumption of the Army's cleanup responsibilities for the ESCA parcels, except for those responsibilities which the Army has retained. The FFA Amendment No. 1 also provides that the Army and/or EPA will continue to be responsible for the selection of response actions for the Early Transfer Property in accordance with CERCLA Section 120(e)(4)(A). In the event EPA, in consultation with DTSC, determines FORA is in default, the Army will complete the response actions in accordance with the terms and conditions of the 1990 FFA and the FFA Amendment No. 1. The EPA is the lead regulatory agency (Army et al., 2007) for FORA's ESCA Remediation Program, which is subject to the AOC.

The remedy selection process for all of the ESCA properties was completed in September 2018. FORA completed the initial implementation of the selected remedies (land use controls [LUCs]). EPA certified the completion of the remedial actions in February 2019. On the basis of FORA's submittal of *Site-Wide Remedial Action Completion Report, FORA Environmental Services Cooperative Agreement (ESCA) Remediation Program, Former Fort Ord, California* (FORA, 2020), on April 14, 2020, EPA determined that the remedial action has been completed site-wide in accordance with the AOC (EPA, 2020). FORA is scheduled to expire as an entity on June 30, 2020. Based on the provisions made in the ESCA and the AOC, in February 2020 FORA identified the City of Seaside as the successor for the ESCA program. This transition process is planned to be completed prior to June 30, 2020.

The Army maintains the Fort Ord Administrative Record in the BRAC Office, Building 4463 Gigling Road, Ord Military Community (former Fort Ord). It contains Fort Ord decision documents, primary documents, and other supporting documents. It should be noted that the FFA provides that the draft-final primary document serves as the final primary document if no party invokes despite resolution within 30 days of its issuance. As such, at Fort Ord, draft-final documents without further comment or dispute are considered as final.

2. Site Background and Remedial Action History

Fort Ord Background

Fort Ord is located near City of Marina in Monterey County, California. The EPA site identification number is CA7210020676. Fort Ord was placed on the NPL by EPA on February 21, 1990, 55 Federal Register at page 6154, due to groundwater contamination.

Fort Ord is a former Army base located adjacent to Monterey Bay in northwestern Monterey County, California, approximately 80 miles south of San Francisco (Figure 1). The former base consists of approximately 28,000 acres adjacent to the cities of Seaside, Sand City, Monterey, and Del Rey Oaks to the south, and the city of Marina to the north. Highway 1 passes through the western part of Fort Ord, separating the beachfront portions from the rest of the base. Laguna Seca Recreation Area and Toro Regional Park also border Fort Ord to the south and southeast, respectively, and several small communities are located along Highway 68.

Beginning in 1917, Fort Ord served primarily as a training and staging facility for infantry troops. The Army originally bought the -present-day East Garrison and nearby lands on the eastern portion of Fort Ord in 1917 to use as a maneuver and training ground for field artillery and cavalry troops stationed at the Presidio of Monterey (POM). No permanent improvements were made until the late 1930s, when administrative buildings, barracks, mess halls, tent pads, and a sewage treatment plant were constructed. In 1938, additional agricultural property was purchased for the development of the Main Garrison. At the same time, the beachfront property was donated to the Army. The Main Garrison was constructed between 1940 and the 1960s, starting in the northwestern corner of the base and expanding southward and eastward. During the 1940s and 1950s, an area within the Main Garrison was utilized as a small airfield. In the early 1960s, construction of the Fritzsche Army Air Field (FAAF) was completed. The smaller Main Garrison airfield was then decommissioned, and its facilities were redeveloped as motor pools and other facilities. From 1947 to 1974, Fort Ord was a basic training center. The 7th Infantry Division was activated at Fort Ord on 21 October 1974 and occupied Fort Ord until base closure in 1994. The 7th Infantry Division was converted to a light division in 1983. Light infantry troops operate without heavy tanks, armor, or artillery. In 1991, Fort Ord was selected for closure; the post was officially closed in 1994.

The Army retains the Ord Military Community and the U.S. Army Reserve Center located at the former Fort Ord. The remainder of former Fort Ord was identified for transfer to Federal, State, and local government agencies and other organizations and, since base closure in September 1994, has been subjected to the reuse process. Future reuses of the land are designated in the *Fort Ord Base Reuse Plan* (FORA, 1997) as modified or updated, as well as *Installation-Wide Multispecies Habitat Management Plan for Fort Ord* (HMP; USACE, 1997). Over 19,000 acres of the former Fort Ord property have been transferred. A large portion of the Inland Training Ranges was assigned to the U.S. Department of the Interior, Bureau of Land Management (BLM). Other areas on the base have been, or will be, transferred through economic development conveyance, public benefit conveyance, negotiated sale, or other means. The major property recipients have been the BLM, California State Parks, California State University Monterey Bay (CSUMB), University of California, FORA, City of Marina, City of Seaside, and County of Monterey.

Operable Units and Remedies at Fort Ord

Remedial Investigations and RAs at the former Fort Ord have been performed and documented since 1986.

Based on reviews of historical records and various supporting investigations, *Final Basewide Remedial Investigation/Feasibility Study, Fort Ord, California* (Basewide RI/FS; HLA, 1995) was developed. The RI, which began in October 1991 following the base closure decision, consisted of two primary components: (1) basewide studies and (2) site investigations. Five basewide studies were conducted:

- Hydrogeologic Characterization
- Background Soil Investigation
- Storm Drain and Sanitary Sewer Investigation
- Surface Water Outfall Investigation
- Biological Inventory.

The Basewide RI/FS describes the future cleanup of hazardous and toxic waste (HTW) contamination in soil and groundwater media. The 43 Installation Restoration Program (IRP) sites at Fort Ord were categorized by the level and complexity of the contamination associated with each site. Three IRP sites were designated as Operable Units (OUs). The HTW sites are shown in Figure 3.

As part of Resource Conservation and Recovery Act (RCRA)/CERCLA integration and because Fort Ord properties were being transferred out of the Army, the RCRA facilities (solid waste management units [SWMUs]) were evaluated in 1995 and 1996. All but two of the originally identified 58 SWMUs were in areas investigated as part of the basewide RI/FS or identified as OUs under CERCLA. The two sites were subsequently closed under the RCRA process. Following additional investigation in 2001, *Draft Final Field Investigation and Data Review, Solid Waste Management Units, Fort Ord, California* (Harding ESE, 2002) identified no recommended further investigative sampling under the SWMU program.

The Army has been investigating and conducting Removal Actions at munitions response sites (MRSs) at Fort Ord since 1993. In 1998, the RI/FS for the Military Munitions Response Program (MMRP) was initiated. Munitions responses are conducted according to *Draft Final Ordnance and Explosives Remedial Investigation/Feasibility Study Work Plan, Former Fort Ord, Monterey County, California* (USACE, 2000). Identified MRSs were categorized into Tracks 0 through 3 based on similar MEC-related characteristics to expedite cleanup, reuse, and/or transfer of the property. The MMRP sites are shown in Figure 4.

These sites have been grouped into the remedial categories described below. Records of Decision (RODs) have been developed for each site or group to specifically address the risks.

- **Interim Action (IA) Sites** are those that have contaminated soil with a limited volume and extent and, as a result, the soils were excavated as an interim action. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, California* (IA Sites ROD; Army, 1994a) was developed in 1994.
- **No Action Sites** are those that require no action, either because no release of contaminants was identified at the site, or because the site activities are excluded under Superfund (e.g. underground storage tank [UST] remediation). *No Action Plug-In Record of Decision, Fort Ord, California* (No Action ROD; Army, 1995a) was developed in 1995.
- **Remedial Investigation (RI) Sites** are those with complex problems that require long-term remediation, development of a risk assessment, and an assessment of the applicable or relevant and appropriate requirements for cleanup.
 - *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California* (RI Sites ROD; Army, 1997b) was developed to address these sites and

includes groundwater remediation at Sites 2 and 12 (Sites 2/12).

- *Explanation of Significant Differences No. 1, Basewide Remedial Investigation, Sites 2 and 12, Former Fort Ord, California* (Army, 2016) was developed to include soil vapor extraction and treatment system to supplement the existing groundwater remedy and implementation of a soil gas monitoring program.
- Individual ROD was generated for soil remediation at Site 3 (*Interim Record of Decision, Site 3 Beach Trainfire Ranges, Fort Ord, California* [Army, 1997a]).
- A ROD Amendment was developed for Site 39 applicable to habitat reserve areas (*Final Record of Decision Amendment Site 39, Former Fort Ord, California* [Army, 2009]).
- **Operable Units (OUs)** are sites with complex cleanup remedial actions that are ongoing. These sites include:
 - OU 1, the FAAF Fire Drill Area, consisting soil contamination at the source and associated groundwater contamination, subject to *Record of Decision, Operable Unit 1, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California* (OU1 ROD; Army, 1996); in a letter dated March 28, 2016, EPA concurred that all remedial actions have been implemented and completed (EPA, 2016);
 - OU 2, the Fort Ord Landfills, including the former landfill and associated groundwater contamination, subject to *Record of Decision, Operable Unit 2, Fort Ord Landfills, Fort Ord, California* (OU2 ROD; Army, 1994b); and
 - OU Carbon Tetrachloride Plume (OUCTP), the former vadose zone source area of carbon tetrachloride and associated groundwater plume, subject to *Record of Decision, Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California* (OUCTP ROD; Army, 2007c).
- **MMRP Sites** have been undergoing munitions response actions designed to minimize the explosive safety risk to the public under designated future uses. The Impact Area Munitions Response Area (MRA) is a restricted MRS and is fenced and warning signs are posted. The majority of the other areas have undergone sufficient evaluations to be released for unrestricted use or released with LUCs. The MMRP sites are grouped into Tracks 0 through 3 and addressed in the following RODs:
 - *Final Record of Decision, No Action Regarding Ordnance-Related Investigation, Former Fort Ord, California* (Track 0 ROD; Army, 2002a); several additional areas were approved for no action based on Track 0 plug-in approval memoranda;
 - *Record of Decision, No Further Action Related to Munitions and Explosives of Concern – Track 1 Sites, No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22), Former Fort Ord, California* (Track 1 ROD; Army, 2005); several additional areas were approved for no further action based on Track 1 plug-in approval memoranda;
 - *Record of Decision, Parker Flats Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California* (Track 2 Parker Flats MRA ROD; Army, 2008b);
 - *Record of Decision, Del Rey Oaks Munitions Response Area, Track 2 Munitions*

Response Site, Former Fort Ord, California (Track 2 Del Rey Oaks MRA ROD; Army, 2008c);

- *Final Record of Decision, Track 2 Munitions Response Site 34, Fritzsche Army Airfield Area, Former Fort Ord, California* (Track 2 MRS-34 ROD; Army, 2015b);
 - *Final Record of Decision, Track 2 Bureau of Land Management Area B and Munitions Response Site 16, Former Fort Ord, California* (Track 2 BLM Area B and MRS-16 ROD; Army, 2017b); and
 - *Final Record of Decision, Impact Area Munitions Response Area, Track 3 Munitions Response Site, Former Fort Ord, California* (Track 3 Impact Area MRA ROD; Army, 2008a). The Impact Area MRA consists of the 6,560-acre portion of the 8,000-acre historical Impact Area that is entirely within the Natural Resource Management Area (NRMA) described in the HMP, and is identified for transfer to BLM.
- **Early Transfer Property** - In connection with the early transfer of a portion of the former Fort Ord, FORA conducted munitions responses under the ESCA and the AOC. The ESCA areas were grouped into several MRAs and addressed in the following RODs:
 - *Record of Decision, Group 1 Seaside and Parker Flats (Phase II) Munitions Response Areas, Former Fort Ord, California* (ESCA Group 1 ROD; Army, 2018a);
 - *Record of Decision, Group 2 California State University Monterey Bay Off-Campus Munitions Response Area, Former Fort Ord, California* (ESCA Group 2 ROD; Army, 2015a);
 - *Record of Decision, Group 3 Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California* (ESCA Group 3 ROD; Army, 2014);
 - *Record of Decision, Group 4 Future East Garrison Munitions Response Area, Former Fort Ord, California* (ESCA Group 4 ROD; Army, 2018b); and
 - *Record of Decision, Interim Action Ranges Munitions Response Area, Former Fort Ord, California* (ESCA IAR MRA ROD; Army, 2017a).

The remedy selection process for the Early Transfer Property was completed in September 2018. FORA has completed the initial implementation of the selected remedies (LUCs). EPA certified the completion of the remedial actions in February 2019. On the basis of *Site-Wide Remedial Action Completion Report, FORA Environmental Services Cooperative Agreement (ESCA) Remediation Program, Former Fort Ord, California* (FORA, 2020), on April 14, 2020, EPA determined that the remedial action has been completed site-wide in accordance with the AOC (EPA, 2020).

These selected RAs are largely complete. The remaining actions are groundwater cleanup under OU2, Sites 2/12, and OUCTP; OU2 landfill operation and maintenance; soil gas extraction and treatment at Sites 2/12; soil remediation in portions of Site 39; and munitions responses in portions of Track 2 BLM Area B and Track 3 Impact Area MRA. Key milestones and decision documents are listed in Table 1.

Environmental remediation sites and media identified for partial deletion are listed below and further described in Sections 4 and 5.

Hazardous and Toxic Waste sites - media to be deleted: soil

Interim Action Sites	No Action Sites	Remedial Investigation Sites
Site 1	Site 11	Site 2 and Site 12**
Site 8	Site 13	
Site 10	Site 18	Sites 16 and 17
Site 14	Site 19	Site 25
Site 15	Site 23	Site 31
Site 20	Site 26	Site 33
Site 21	Site 27	Site 39 (specific HAs)
Site 22	Site 28	Sites with site-specific RODs
Site 24	Site 29	
Site 30	Site 35	
Site 32	Site 37	
Site 34*	Site 38	
Site 34B	HA-79	OU1
Site 39A	HA-92	OU2 Area A
Site 39A HA-80/HA-85	HA-98	Operable Unit Carbon Tetrachloride Plume
Site 39B	HA-100	
Site 39B HA-161	HA-121	
Site 40*	HA-183	
Site 41		
OF-15		
OF-34/35		

*Excludes PFAS soil sampling areas.
 **Excludes soil-gas investigation area.

HA: historical area
 OF: outfall
 OU: operable unit
 PFAS: perfluoroalkyl substances
 ROD: record of decision

Military Munitions Response Program sites - media to be deleted: soil

Military Munitions Response Program Sites	Early Transfer Property
Track 0	ESCA Group 1 MRAs
Track 1	ESCA Group 2 MRA
Track 2 Parker Flats MRA	ESCA Group 3 MRAs
Track 2 Del Rey Oaks MRA	ESCA Group 4 MRA
Track 2 MRS-34 (FAAF)	ESCA Interim Action Ranges MRA

ESCA: Environmental Services Cooperative Agreement
 FAAF: Fritzsche Army Air Field
 MRA: munitions response area
 MRS: munitions response site

3. NPL Deletion Parcels

The Army has identified portions of the Fort Ord Superfund Site where all appropriate response actions have been implemented. Response completion was evaluated for each media: groundwater, soil, and military munitions.

Groundwater remedies for OU2, OUCTP, and Sites 2/12 have been determined to be operating properly and successfully (OPS), however, the groundwater cleanup levels and remedial action completion have not been achieved. Remedial action completion has been achieved at OU1, as described in the *Final Closeout Report, Operable Unit 1 Groundwater Remediation, Fritzsche Army Airfield Fire Drill Area, Former Fort Ord, California (HGL, 2017)*. Consistent with EPA guidance and policy, groundwater remedies are not included in the NPL deletion at this time.

There is no human health exposure to the contaminated groundwater. The A-Aquifer (the uppermost aquifer) is not used as a drinking water source. The Army's program to monitor and treat groundwater contamination in the A-Aquifer, Upper 180-Foot Aquifer, and Lower 180-Foot Aquifer, as well as institutional controls to prevent unauthorized access to groundwater contamination plumes, prevent human exposure. Groundwater at Sites 2/12, OU2 and OUCTP currently is not used by residents within the Fort Ord area for domestic household purposes. Drinking water in the Fort Ord area is provided by Marina Coast Water District (MCWD) and is pumped from wells that are located east of the Sites 2/12, OU2 and OUCTP areas. These supply wells are screened in the Lower 180-Foot Aquifer or deeper aquifers. Groundwater within the Sites 2/12, OU2 and OUCTP areas is located in the Prohibition Zone of the Special Groundwater Protection Zone at the former Fort Ord, within which the installation of new supply wells is restricted by Monterey County. According to Monterey County Code Title 15 Section 15.08.140, a prohibition zone is an area overlying or adjacent to a contaminant plume where water well construction is prohibited and applications for water wells will not be accepted; therefore, direct contact groundwater exposure pathways for residents potentially exposed to groundwater from the Sites 2/12, OU2 and OUCTP areas are currently incomplete and are expected to remain so in the future.

The Army shares the groundwater remediation and monitoring data with MCWD. As a water purveyor, MCWD conducts water quality monitoring to ensure that the drinking water meets federal and state standards. The annual Consumer Confidence Report (available at mcwd.org) describes the detection of trichloroethene (TCE) in supply Wells 29, 30 and 31, and also in the Sand Tank and Intermediate Tank. MCWD continues to monitor the wells quarterly for TCE. Presence of groundwater contamination in underlying aquifers does not adversely affect the reuse of the property.

NPL Deletion Parcels

Parcels for which investigations and remedial actions are complete for soil and military munitions are identified for partial deletion. The deletion parcels are listed in Table 2 and shown in Figure 2. The deletion parcels make up 13,394 acres of the former Fort Ord.

Due to evolving science and policy regarding contamination due to perfluoroalkyl substances (PFAS) compounds, the parcels associated with OU1 are identified for partial deletion for soil only. The FAAF Former Fire Drill Area will be investigated for PFAS compounds in groundwater as recommended in the *Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California* (Ahtna, 2020). Investigation at the FAAF Fire Drill Area will be independent of the completed OU1 remediation and not associated with the OU1 ROD.

For Sites 2/12, the selected remedy included soil remediation at the source and remediation of a groundwater plume. The soil remediation is complete, and the property is available for unrestricted use other than the restriction on groundwater use. Groundwater treatment continues. A soil vapor extraction and treatment system (SVETS) is currently operating to address the presence of volatile organic compounds (VOCs) in soil gas as part of the groundwater remedy. The SVETS will cease operation when soil gas quality assurance project plan (QAPP) decision criteria have been met and a rebound study will be performed to confirm if chemical of concern (COC) concentrations in soil gas are stabilizing or declining. There is no human health exposure to the contaminated groundwater or soil gas. The properties at Sites 2/12 are included in the partial deletion with the exception of the soil gas investigation area.

Site 39 soil remedial actions encompass areas designated for future development and habitat reserve areas. Other than HA-18D and HA-23D, the Site 39 development areas are included in the partial deletion on the basis of completed RAs and post-remediation risk assessments. Within the Site 39 habitat reserve areas, four ESCA parcels that have been transferred to FORA are included in the partial deletion on the basis of completed RAs (Parcels E38, E39, E41 and E42).

As part of the remedial action at OU2, landfill Area A, located north of Imjin Road (renamed Imjin Parkway), was clean-closed. All landfill waste and contaminated soil in Area A were excavated, brought south of Imjin Road, and consolidated into the other landfill cells (Areas B through F). Parcels associated with the clean-closed OU2 Landfills Area A are included in the partial deletion.

Under the Munitions Response RI/FS program, all of the former Fort Ord properties have been evaluated for the potential for munitions hazards. The status of the MMRP is displayed on Figure 4. The partial deletion areas include all of the approved Track 0 (no action) areas. Most Track 1 areas (no further action) are included in the partial deletion. Track 2 MRS-34 (FAAF) is included in the partial deletion, as the site required no further action for munitions response.

There are parcels that were transferred prior to the initiation of the Munitions Response RI/FS program in 1998. These parcels were evaluated as part of the Community Environmental Response Facilitation Act (CERFA), Environmental Baseline Survey (EBS), and Finding of Suitability to Transfer (FOST) processes. The primary objective of CERFA is for federal agencies to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment. Several parcels were identified as having no evidence of current or past storage, release, or disposal of hazardous substances or petroleum products or their derivatives, and for which there is no evidence of the presence of other environmental, hazard, or safety concerns. Parcels with no evidence of hazardous substances but required evaluation for potential for the presence of UXO were identified as CERFA Qualified. The parcels were further evaluated in the EBS/FOST processes and transferred after receiving EPA concurrence for transfer under CERCLA Section 120(h)(4) or 120(h)(3). Parcel-specific information is provided in Table 2.

Track 2 Parker Flats MRA and Track 2 Del Rey Oaks MRA are included in the partial deletion. EPA has determined that remedial actions for munitions responses have been completed. For parcels that have been transferred, LUCs are being implemented. These sites will continue to be evaluated in future five-year reviews.

All of the properties subject to the ESCA and the AOC are included in the partial deletion except for: the areas of HA-18D and HA-23D (within the ESCA Group 1 Seaside MRA), where lead soil cleanup is pending.

Some properties associated with Track 2 MRS-34 (FAAF), Track 2 Del Rey Oaks MRA, the ESCA MRAs, and OUCTP had been transferred under the early transfer authority and, per CERCLA Section 120(h)(3)(C), the covenant of Section 120(h)(3)(A)(ii)(I) (that all remedial action necessary to protect human health and the environment has been taken prior to the transfer) was deferred at the time of early transfer of the properties. By February 2019, EPA has determined that all necessary remedial action has been taken. The Army will provide the CERCLA warranty of Section 120(h)(3)(C)(iii). The property transfer status is provided in Table 2. Deletion parcels for which CERCLA warranty is pending are listed in Table 3.

For parcels with LUC requirements as part of the selected remedy, such as the ESCA MRAs, the Army had entered into Covenants to Restrict the Use of Property (CRUP) with DTSC that document land use restrictions. These restrictions are in addition to the restrictions in property deeds. DTSC has modified several CRUPs to make them consistent with the selected remedies. CRUPs are recorded with the Monterey County.

Parcels that Remain on NPL

Parcels that remain on the NPL have pending additional evaluations or on-going remedial activities. These areas are displayed in Figure 2.

The *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate, Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California* (Ahtna, 2020) was developed in response to the requests from EPA and DTSC for additional information regarding potential presence of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) (PFAS compounds) at the former Fort Ord. It summarizes a basewide review of historical activities with the potential to cause PFOA and PFOS contamination in soil and groundwater at former Fort Ord sites. The draft final PFAS technical summary report is currently under review by regulatory agencies and is expected to be finalized by summer 2020. The locations of recommended PFAS soil investigations are not included in the partial deletion (Parcels S2.1.6, L5.1 and L5.1.8). Groundwater media is not included in the NPL deletion at this time. Preliminary assessment will be prepared and site inspection will be conducted to identify areas of concern following the finalization of the PFAS Technical Summary Report.

For Sites 2/12, the SVETS is operating to address the presence of VOCs in soil gas as part of the groundwater remedy. Once the soil gas QAPP criteria are met, the SVETS will cease operation and a rebound study will begin to confirm if COC concentrations in soil gas are stabilizing or declining. There is no human health exposure to the contaminated groundwater or soil gas. However, based on EPA guidance, the soil gas investigation area is not included in the partial deletion (Parcels E2b.2.1, E2b.2.2, E2b.2.5, and L12.3).

The Site 39 habitat reserve areas that have not been transferred remain on the NPL at this time, as there are remaining soil remedial actions pending completion of munitions response under the Track 3 ROD for the Impact Area MRA.

In September 2018, DTSC promulgated a new toxicity criterion for lead that limits the increase in blood lead levels to 1 µg/dL as specified in California Code of Regulations (CCR) Title 22, Section 69021 to attain the human health protection specified in Section 69022. The residual lead levels in Site 39 residential development areas where soil remediation had previously been completed were subjected to re-evaluation. As a result, additional soil remediation was identified in HA-18D and HA-23D. These areas have been delineated by a property survey and are not included in the partial deletion (portions of Parcels E23.1, E23.2 and E24).

Maintenance of the OU2 Landfills (Cells B through F) and restoration of associated groundwater contamination are ongoing. The main landfill area is not included in the partial deletion (Parcels E8a.1.1.1 and E8a.2).

The majority of the federal habitat reserve areas are not included in the partial deletion. Parcels F1.1.1, F1.2 and F1.3 include Track 1 areas (no further action) as well as areas subject to remedial action under the Track 2 ROD for BLM Area B and MRS-16. These parcels are not included in the partial deletion. The Track 3 Impact Area MRA, where the remedial action is underway, occupies parcels F1.13, F1.13.1 and F1.7.4.

4. Site-Specific Information: HTW Sites

Information on HTW sites that are identified for partial deletion is provided below. HTW sites are shown on Figure 3. Reference documents specific to the site summaries are listed at the end of each subsection.

Please note that Figure 1 shows current configurations of major roads in the Fort Ord vicinity. As reuse progressed, road names and alignments have been adjusted. Site summaries may refer to road names that existed at the time of investigation. For detailed locations of sites and features, please refer to the documents referenced in the site summaries.

Interim Action Sites

The *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, California* (IAROD; Army, 1994) was developed to address immediate, imminent, and/or significant risks to human health and the environment posed by limited area of shallow contaminated surface soil at Fort Ord. It was understood that IA would be implemented before final remedial alternatives or cleanup levels for given chemicals were established, but a conservative approach would be used in developing soil cleanup levels to reduce the likelihood of further remedial actions at an IA area. The selected IA remedy included: excavation of limited quantities of shallow contaminated surface soil, followed by confirmation sampling and backfilling with clean fill; and soil treatment, recycling and/or disposal. The IAROD established the following criteria that a site must meet to qualify as an IA site and described the approval process for implementing IA:

- Contaminated soil generally consisting of sand and/or silty sand from fine to medium grain size;
- Groundwater is relatively deep (typically more than 60 feet below ground surface [bgs]);
- Contaminated soil is of limited extent, generally 500 to 5,500 cubic yards (cy);
- Contaminated soil to be excavated is not more than 25 feet bgs;
- Contamination is generally a result of routine operations;
- Chemicals in the contaminated soil are likely to be petroleum hydrocarbons, solvents, oils, metals, and pesticides.

For each proposed IA site, the process began with a site characterization investigation which included screening risk evaluation (SRE).

If a site met the IAROD criteria, an IA approval memorandum was submitted for regulatory agency approval. The public was notified that an approval memorandum was submitted, and again two weeks before work began. The IA was then implemented, and a confirmation report was prepared upon completion. If it was determined that the contamination was too extensive to be remediated under the IAROD criteria, then the site was further evaluated as an RI site.

The RAOs for IA sites are the reduction of immediate risks to human health and protection of groundwater. RAOs for the protection of human health from exposure to chemicals in contaminated soil at an IA area consider the following exposure routes: ingestion or dermal contact with contaminated soil, ingestion of contaminated soil or groundwater affected by chemicals leaching from contaminated soil, and the inhalation of dust created from contaminated soil. Achievement of the RAOs for the reduction of long-term human exposure to the contaminated soil through these pathways requires the establishment of allowable chemical concentrations in surface soils. Similarly, achievement of the RAOs for the protection of groundwater quality, as well as for the prevention of ingestion of contaminated groundwater, requires the establishment of allowable chemical concentrations in the soil that will not

adversely impact groundwater, if present. A conservative approach will be used to minimize the likelihood of future remedial actions. Risks to the ecosystem from the contaminated soil and proposed remedial action will be qualitatively assessed at each IA area.

Selected Remedy and Decision Documents

Two alternatives were developed for the IAROD: (1) No Action and (2) Excavation with Soil Treatment, Recycling, and/or Disposal. Alternative 2 was selected. The remedial action consisted of excavation of contaminated soil from the IA area and backfilling the excavation with clean material. Field screening analysis and laboratory confirmation samples were required to establish that contaminated soil had been removed prior to backfilling. Excavated soil would then be treated, recycled, or disposed of.

The IAROD described Fort Ord Soil Treatment Area (FOSTA), located at the 519th Motor Pool, as an approved destination for excavated soil. The FOSTA would serve as an area to store excavated IA soil pending waste classification as well as storage for soil until sufficient quantities are obtained for treatment of recycling; and as a treatment area for nonhazardous soil containing petroleum hydrocarbons and solvents. When appropriate, treated or untreated soil below health-based standards and classified as "inert" may be used as part of the OU2 landfill cap, as roadbase material, or as clean fill. Soil that cannot be treated at the FOSTA would be transported offsite using, where appropriate, a licensed hazardous waste hauler; such soil would be sent to a licensed treatment, storage, or disposal facility designed and approved to accept such wastes.

Response Actions

Response actions were implemented at several sites, as further described below. All RAOs as defined in the IAROD have been met and all response actions have been completed for the IA sites.

IRP Site	Confirmation Report Date	EPA Concurrence Date
Site 1	December 10, 1997	April 6, 1998
Site 8	August 26, 1996	April 14, 1997
Site 10	August 30, 1996	September 19, 1996
Site 14	February 12, 1996	March 7, 1997
Site 15	August 13, 1996	April 7, 1997
Site 20	July 1, 1996	July 28, 1997
Site 21	July 10, 1996	April 14, 1997
Site 22	May 22, 1996	September 19, 1996
Site 24	January 23, 1997	April 14, 1997
Site 30	February 20, 1996	April 14, 1997
Site 32	March 5, 1998	March 19, 1998
Site 34	September 8, 1998	February 5, 2002
Site 34B	September 22, 2003	January 10, 2012
Site 39A	February 10, 1998	February 5, 2002
Site 39A HA-80/HA-85	March 7, 2006	May 25, 2006
Site 39B	April 2, 1997	January 13, 1998
Site 39B HA-161	March 24, 2011	January 6, 2011
Site 40	January 2, 1997	January 31, 1997
Site 41	February 4, 1997	April 14, 1997
OF-15	September 3, 1998	March 16, 2005
OF-34/35	June 20, 1997	July 23, 1997

Site 1 – Ord Village Sewage Treatment Plant

Site Background

Site 1 is the former Ord Village Sewage Treatment Plant in the southwest corner of Fort Ord within the coastal dunes. Sewage treatment operations ceased in 1964 and the facility was then used as a sewage pump station. Potential COCs include petroleum hydrocarbons, VOCs, semi-volatile organic compounds (SVOCs), mercury and other metals, fecal coliform, and nitrates (Army, 2002). The parcel associated with Site 1 that is included in the partial deletion is S3.1.1.

Remedial Investigation and Feasibility Study

The Remedial Investigation at Site 1 investigated the chlorine tank, the sanitary sewer system, the aboveground storage tank (AST), and the sludge-drying beds. Field work included the following:

- Drilling and sampling 10 soil borings
- Drilling, installing, and sampling three groundwater monitoring wells (note that monitoring wells have since been destroyed in 2002)
- Conducting a groundwater-level tidal influence study
- Conducting exploratory trenching at the former trickling filter locations
- Collecting and analyzing three surface samples of the sewage residue in the sludge-drying beds
- Hand-augering two borings in the holding ponds
- Hand-augering three borings in the former trickling filters

Elevated levels of total petroleum hydrocarbons (TPH) and bis(2-ethylhexyl) phthalate (BEHP) above the preliminary remediation goal (PRG) were found in surface soil samples. Mercury was detected in soil samples in the former trickling filter area at values exceeding the Fort Ord background concentrations and the PRG. Concentrations of thallium, antimony, cadmium, nitrate, chloride, and total dissolved solids exceeded maximum contaminant levels (MCLs) in one or more groundwater samples (HLA, 1996).

The SRE identified potential health risks of exposure to mercury may be unacceptably high at Site 1. Results of quantitative groundwater modeling show that no significant impact from contaminated soil was expected to groundwater quality. The ecological risk assessment (ERA) indicated that adverse impacts to flora and fauna at the site are unlikely (HLA, 1996).

Based on data from the investigation, the soil at the former trickling filter area and from the holding pond area was recommended for removal and excavation under the IAROD process at Fort Ord. Three groundwater monitoring wells at Site 1 were also recommended for inclusion in the Basewide Groundwater Monitoring Program.

Response Actions

The estimated excavation volume for the site was 200 cy to a depth of 6 feet bgs in the vicinity of the trickling filters and 350 cy to a depth of 2 feet bgs at the location of the holding pond. The Army submitted an Approval Memorandum on May 9, 1997 for plug-in of Site 1 with the IAROD and proposed excavation (Army, 1997). The EPA concurred on May 14, 1997 (EPA, 1997).

A total of 862 cy of soil was removed from the two excavation areas at Site 1. The trickling filter excavation encompassed an approximately 40 by 45-foot area, for a total volume of approximately 400 cy. The holding pond excavation encompassed an approximately 40 by 70

foot area, for a total volume of approximately 450 cy. Results of confirmation samples collected at the excavation area of the trickling filter were above the mercury PRG concentration. Approximately 12 cy of additional soil were subsequently removed and additional confirmation samples did not have concentrations of mercury above the detection limit. Confirmation samples were also collected at the excavation area of the holding pond and all results were either below the laboratory reporting limit or their respective target cleanup concentrations (TCCs). Based on the results of the composite samples collected from the excavated soil, the soil was used in the foundation layer of the OU2 Landfills engineered cover system (HLA, 1997).

Maximum detected left-in-place concentrations were 0.72 mg/kg for mercury, non-detect (ND) (0.51) mg/kg for BEHP, and 22 mg/kg for unknown TPH. Results of confirmation sampling and subsequent risk evaluation indicate that no further threat to human health, the environment, or groundwater is anticipated at this site and no further investigation or remediation is recommended (HLA, 1997).

The EPA concurred with the Site 1 IA Confirmation Report on April 6, 1998 (EPA, 1998).

In the Report of Quarterly Monitoring - October 1998 through September 1999, Site 1 was removed from the sampling program after the June 1998 sampling event (HLA, 2000).

Cleanup Levels

The TCCs for Site 1 were:

- Mercury - 20 mg/kg
- BEHP - 13 mg/kg
- Unknown TPH - 500 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 1. There are no additional actions found to be necessary for the soil at Site 1.

Document References

- Harding Lawson Associates (HLA), 1996. *Draft Final Site Characterization Site 1 – Ord Village Sewage Treatment Plan, Fort Ord, California*. August 26. AR# BW-1370
- HLA, 1997. *Interim Action Confirmation Report Site 1 – Ord Village Sewage Treatment Plan, Fort Ord, California*. December 10. AR# IAFS-199
- HLA, 2000. *Report of Quarterly Monitoring, October 1998 through September 1999, Fort Ord, California*. March 7. AR# BW-2064.
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1997. *Approval Memorandum Proposed Interim Action Excavations (Revision 1) Site 1 – Ord Village Sewage Treatment Plan, Fort Ord, California*. May 9. AR# IAFS-167
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1997. *EPA Response to Approval Memorandum for Proposed Interim Action Excavation (Revision 1) – Site 1*. May 14. AR# IAFS-174

- EPA, 1998. *EPA Response to Interim Action Confirmation Report Site 1*. April 6. AR# BW-1972

Site 8 - Range 49, Molotov Cocktail Range

Site Background

Site 8 was an undeveloped parcel at Inland Range 49, used as a former training area where troops practiced using Molotov cocktails. Contamination associated with Site 8 included flammable liquids (possibly leaded gasoline, transmission oil, and motor oil) in soil adjacent to the former location of two armored vehicles that were used as practice targets for the Molotov cocktails (Army, 2002). The parcel associated with Site 8 that is included in the partial deletion is E19a.4.

Remedial Investigation and Feasibility Study

The Remedial Investigation at Site 8 included excavating hydrocarbon-stained soil using hand-held shovels (HLA, 1992b). Based on the SRE (HLA, 1992a), the screening soil concentrations were developed: 1,200 mg/kg and 210 mg/kg for TPH as diesel (TPHd) and lead, respectively. The lead concentration measured in the Site 8 soil sample (39 mg/kg) was below the screening level. The TPH concentration measured in the Site 8 soil sample (4,200 mg/kg) had exceeded the screening level, indicating the need for remediation or further evaluation.

Site 8 is located within the habitat reserve. The IA Approval Memorandum (Army, 1994) described that based on an ecological assessment and biological clearances completed for Site 8, no endangered or threatened species will be adversely impacted by the proposed excavation activities. The PRG of 500 mg/kg for TPH will be used for this site.

Response Actions

The Army submitted an Approval Memorandum on June 4, 1994 for plug-in of Site 8 with the IAROD and proposed excavation (Army, 1994). The EPA concurred with the proposed excavation at the identified location on June 29, 1994 (EPA, 1994).

Excavation of visibly stained soil was completed in two phases to varying depth. 80 cy was excavated during Phase 1 and 22 cy was excavated during Phase 2. The soil was transported to the FOSTA. Based on confirmation sampling, all TCCs were met. The excavation was backfilled with clean soil (HLA, 1996).

Confirmation sampling was done to confirm that RAO criterion addressing human health risk had been achieved. Confirmation samples indicated the remaining TPH concentrations were a maximum of 260 mg/kg, less than the TPH TCC of 500 mg/kg (HLA, 1996).

A health risk evaluation was performed. The residual concentrations of all detected extractable TPH were below the PRG. No adverse impacts to human health or groundwater quality are expected to be associated with the residual levels of TPH. Based on the results of confirmation sampling and subsequent risk evaluation, no further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on April 14, 1997 (EPA, 1997).

Cleanup Levels

The TCC for Site 8 was:

- TPH - 500 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 8. There are no additional actions found to be necessary for the soil at Site 8.

Document References

- Harding Lawson Associates (HLA), 1992. *Characterization Modification, Site 8, Range 49 Molotov Cocktail Range, Fort Ord, California*. November 6. AR# BW-1950
- HLA, 1996. *Interim Action Confirmation Report Site 8 –Range 49 (Molotov Cocktail Range), Fort Ord, California*. August 26. AR# BW-1501
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- Army, 1994. *Approval Memorandum Proposed Interim Action Excavation Site 8 – Range 49 (Molotov Cocktail Range) Fort Ord, California*. June 4. AR# IAFS-200
- U.S. Environmental Protection Agency (EPA), 1994. *EPA Response to Approval Memorandum Proposed Interim Action Site 8*. June 29. AR# IAFS-137
- EPA, 1997. *EPA Response to Approval Memorandum Site 8*. April 14. AR# IAFS-162

Site 10 – Burn Pit

Site Background and History

Site 10 is in the Main Garrison area of the former Fort Ord near the main gate. The site consisted of a burn pit in which petroleum hydrocarbons were ignited and extinguished for firefighting training and demonstrations during Fire Prevention Week each year. Although no construction record for the pit was found, it is believed to have been constructed soon after the fire station was built in the mid-1950s (Weston, 1990). The pit was approximately 45 feet long, 25 feet wide, and 2 feet deep. A 2-inch diameter pipe penetrated the southern wall of the pit and a drainage swale, apparently resulting from soil settlement after installation of the pipe, extended from the south side of the pit. The burn pit was filled with water and fuel, which was then ignited and extinguished using a foaming product. By 1991, the pit was no longer used and was grass-covered (EA, 1991). Fuels used for this purpose reportedly included off-specification jet fuel (JP-4), gasoline, diesel, and waste oil. After the training sessions, water and residual unburned fuel percolated into the soil at the bottom of the burn pit (HLA, 1996). There are no PFAS soil concerns at the site based on the response actions taken at the site. Further investigation is recommended for PFAS groundwater contamination; groundwater is not considered for deletion from the NPL.

The parcel associated with Site 10 that is included in the partial deletion is F2.3.3.

Remedial Investigation and Feasibility Study

The initial site characterization activities at Site 10 included drilling and sampling a single soil boring and installing and sampling three groundwater monitoring wells (note that all Site 10 wells have since been destroyed). Supplemental investigations consisted of soil gas sampling, installing and sampling piezometers and three additional groundwater monitoring wells, two

phases of surface soil sampling, drilling and sampling six soil borings, and an exploratory excavation of the drainage swale at the southern end of the burn pit. The depth to groundwater at the site was determined to be between 240 to 260 feet below ground surface and sampling did not indicate contaminant detections in any of the 6 wells at the site (HLA, 1995).

The soil gas investigation identified low levels of total hydrocarbons, benzene, toluene, ethylbenzene and xylene (BTEX), and tetrachloroethylene (PCE) in the vicinity of the burn pit. Organic compounds detected in soil samples included unknown hydrocarbons, VOCs, SVOCs, dioxins, and furans. Concentrations of inorganic chemicals in soil were below PRGs except for arsenic, beryllium, and lead, which were detected at concentrations exceeding PRGs in samples collected from within the burn pit and at depths less than 6 feet bgs (HLA, 1995).

An SRE was conducted based on the site characterization data (HLA, 1995). The SRE consisted of:

- Comparing concentrations of chemicals detected in soil at Site 10 with site- and chemical-specific health-based PRGs to evaluate the need for further action at the site.
- Evaluating potential impacts to groundwater.
- Providing a qualitative discussion of ecological receptors.

The results of the SRE indicated possible health risks associated with potential exposure to contaminants in soil. The results of a qualitative analysis indicate that site-related chemicals (SRCs) evaluated at Site 10 are not expected to impact groundwater if left in place at maximum detected site concentrations, except for unknown extractable TPH. However, the results also indicate no adverse impacts to groundwater are expected from soil concentrations of extractable TPH at or below the PRG of 500 mg/kg. Based on an ecological receptor exposure analysis conducted as part of the quantitative basewide ERA for Fort Ord, exposures of ecological receptors to chemicals at Site 10 are expected to be negligible (HLA, 1996).

Based on the results of the site characterization and SRE, the contaminated soil in the Site 10 burn pit area met the criteria for early soil excavation established as part of the IAROD. As such, the soil was recommended for excavation under the IAROD (HLA, 1996).

In 2020, the *Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California*, was developed in response to requests from EPA and DTSC for additional information regarding the potential presence of PFAS compounds at former Fort Ord. Site 10 is recommended for further investigation for PFAS compounds for groundwater only (Ahtna, 2020). No additional soil investigation is recommended as impacted soils were excavated, transported offsite, and remediated in 1995. PFAS may have been present in the excavated soils, and prior to excavation precipitation and training activities could have caused downward leaching of PFAS to groundwater. Groundwater flow in the Upper 180-Foot Aquifer in this area is to the northeast toward the Fort Ord Landfills with hydraulic conductivities up to 366 feet per day. Particle tracking analysis using the Fort Ord groundwater model indicates PFAS entering the Upper 180-Foot Aquifer at Site 10 could have traveled as far as the Fort Ord Landfills within 30 years and potentially commingled with the OU2 TCE plume in the Upper 180-Foot Aquifer (Ahtna, 2020). Downgradient monitoring wells, part of the OU2 groundwater remedy, are recommended to be used to investigate PFAS (Ahtna, 2020). Groundwater is not included in the NPL deletion at this time.

Response Actions

The Army submitted an Approval Memorandum on April 19, 1995 for the proposed IA excavation at Site 10 (Army, 1995). The EPA concurred with the proposed action on May 4, 1999 (EPA, 1999). The IA was performed at Site 10 in July 1995 and required three excavations: one at the burn pit, one at the drainage swale, and one east of the burn pit. The excavation area was approximately 80 feet wide by 100 feet long to a maximum depth of 10 feet. 1,451 cy of soil were removed and treated at the FOSTA. After excavation was complete, 22 confirmation samples were collected from the excavation bottom and sidewalls. Analytical results indicated all TCCs for SRCs were met, and the excavation was backfilled with clean soil (HLA, 1996).

Results of the IA confirmation sampling indicated soils with concentrations of SRCs above their respective TCCs were removed, and results of the confirmation sampling and subsequent health risk evaluation indicated the RAO criterion for the protection of human health was achieved at Site 10.. Therefore, no further investigation or remediation is recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on September 19, 1996 (EPA, 1996).

Cleanup Levels

The TCCs for SRCs at Site 10 were:

- TPH – 500 mg/kg
- Chlorinated dibenzo-p-dioxins and dibenzo-p-furans – 1.20E-06 mg/kg
- Antimony – 27 mg/kg
- Arsenic – 0.87 mg/kg
- Beryllium – 0.39 mg/kg
- Cadmium – 8.1 mg/kg
- Lead – 240 mg/kg

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Site 10.

Determination that the Criteria for Deletion have been Met

The implemented remedy achieves the degree of cleanup or protection specified in the IAROD for the deletion parcel and no further Superfund response is needed to protect human health and the environment.

Document References

- Ahtna Environmental, Inc. (Ahtna), 2020. *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California*. February 27. AR# OU2-722A
- EA Engineering, Science, and Technology (EA), 1991. *Draft Final Fort Ord, California, Base-Wide Remedial Investigation/Feasibility Study, Volume 1: Literature Review and Base Inventory Report*. March. AR# BW-0136

- Harding Lawson Associates (HLA), 1995. *Draft Final Data Evaluation and Recommendation Report, Site 10-Burn Pit, Fort Ord, California*. March 30. AR# BW-1711
- HLA, 1996. *Interim Action Confirmation Report, Site 10 – Burn Pit, Fort Ord, California*. August 30. AR# BW-1382
- Roy F. Weston, Inc. (Weston), 1990. *Enhanced Preliminary Assessment, Fort Ord, California*. December. AR# BW-2427
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1995. *Approval Memorandum, Proposed Interim Action Excavation, IA Area 10A, Site 10 Burn Pit, Fort Ord, California*. April 19. AR# IAFS-146
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Comments Re: Site 10-Burn Pit, Proposed Interim Action for Contaminated Surface Soil Remediation at Area 10A, Approval Memorandum*. May 4. AR# BW-1129
- EPA, 1996. *EPA Comments Subject: Remedial Action Completion Operable Unit #3, Site 10-Burn Pit, Fort Ord, California*. September 19. AR# BW-1384

Site 14 – 707th Maintenance Facility

Site Background

Site 14 was an approximately 19-acre area at the northwest corner of the intersection of 3rd Street and 6th Avenue in the Main Garrison. The site was used as a maintenance and fueling facility for military vehicles, beginning in the early 1950s. Potential areas of concern included soil associated with gasoline, diesel, and waste oil USTs; hazardous materials storage areas; grease racks; wash racks; and oil/water separators (Army, 2002). The parcels associated with Site 14 that are included in the partial deletion are L5.8.1, L23.4, S1.5.1.1, S1.5.2, and S1.7.

Remedial Investigation and Feasibility Study

Fifteen soil borings and one pilot boring were drilled and sampled, and one monitoring well was installed and sampled. Three borings were installed near the former waste oil UST. The pilot boring and monitoring well were drilled near a former fueling station. The remaining borings were drilled in areas near grease racks, oil/water separators, storage areas, and a wash rack. Along with the new groundwater monitoring well, three previously installed monitoring wells were also sampled as part of this investigation (HLA, 1994). Note that three monitoring wells have since been destroyed and one is still used for water level monitoring. Soil samples collected in the vicinity of the former waste oil UST contained detectable concentrations of PCE, unidentified VOCs, unknown petroleum hydrocarbons, and arsenic. Soil samples collected from one of the former grease racks contained detectable concentrations of chrysene, unknown petroleum hydrocarbons, and total recoverable petroleum hydrocarbons (TRPH) (Army, 1995). The results of the SRE indicated possible health risks associated with potential exposure to contaminants in soil (HLA, 1996).

Groundwater modeling indicated that no significant impacts to groundwater were expected from SRCs at Site 14. Exposure of ecological receptors to chemicals at Site 14 was expected to be negligible (HLA, 1994).

Based on the results of the RI/FS, this site was recommended for inclusion in the IAROD for excavation of shallow soil beneath the grease racks, and the soil in the area of the former waste oil UST at Building 4855 (HLA, 1994).

Response Actions

The Army submitted an Approval Memorandum on March 7, 1995 for plug-in of Site 14 with the IAROD and proposed excavation (Army, 1995). The total volume of excavated soil was estimated to be 555 cy at the former waste oil UST and 755 cy from the former grease rack (Army, 1995). The EPA concurred with the proposed excavation at the identified locations on April 3, 1995 (EPA, 1995).

Excavation at the location of the former UST was completed with a volume of approximately 700 cy. Four separate excavations were completed at the locations of the grease racks for an approximate total of 520 cy of soil excavated (for a total of 1,200 cy for Site 14). Based on confirmation sampling, excavated soil was treated at the FOSTA. The excavations were backfilled with clean fill (HLA, 1996).

Results of confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater is anticipated at this site. No further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on March 7, 1997 (EPA, 1997).

Cleanup Levels

TCCs for IA Area 14A were:

- Total unknown petroleum hydrocarbons - 500 mg/kg
- TRPH - 500 mg/kg
- PCE - 0.16 mg/kg
- Arsenic - 45 mg/kg

TCCs for IA Area 14B were:

- TRPH - 500 mg/kg
- Total unknown petroleum hydrocarbon - 500 mg/kg
- Chrysene - 15 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 14. There are no additional actions found to be necessary for the soil at Site 14.

Document References

- Harding Lawson Associates (HLA), 1994. *Draft Final Site Characterization Site 14 – 707th Maintenance Facility*. November 9. AR# BW-0839
- HLA, 1996. *Confirmation Report Site 14 – 707th Maintenance Facility, Fort Ord, California*. February 12. AR# BW-1517
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1995. *Approval Memorandum Proposed Interim Action Excavation Site 14 – 707th Maintenance Facility, Fort Ord, California*. March 7. AR# IAFS-141

- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Approval Memorandum Site 14*. April 3. AR# IAFS-111
- EPA, 1996. *EPA Response to Confirmation Report Site 14*. March 7. AR# BW-1615

Site 15 – Directorate of Engineering and Housing (DEH) Yard

Site Background

Site 15, the DEH Yard was an approximately 10-acre developed parcel in the Main Garrison. The site consisted mainly of administration buildings, with some areas used for light industry and/or storage. Potential sources and chemicals of contamination include PCBs associated with transformer storage, pesticide mixing, and two former USTs (Army, 2002). The parcels associated with Site 15 that are included in the partial deletion are L20.17.1 and S1.5.2.

Remedial Investigation and Feasibility Study

The Remedial Investigation focused on potential sources of PCB and pesticide contamination at the site. The investigation did not detect any PCBs at the site, the highest pesticide chlordane concentration was detected at 4,000 mg/kg in near-surface soil sampled immediately northeast side of Building T-4913 (HLA, 1995).

The SRE for the site determined that the potential health risks of exposure to SRCs may be significant. Groundwater modeling indicated that no significant impacts to groundwater are expected from SRCs detected at the site. The ERA indicated that exposures of ecological receptors to chemicals at Site 15 are expected to be of “possible” to “probable” concern because of the detected pesticides (HLA, 1995).

Response Actions

The Army submitted an Approval Memorandum on March 6, 1996 for plug-in of Site 15 with the IAROD and proposed excavation (Army, 1995). The soil area around Building T-4913 was to be excavated for an approximate volume of 975 cy to a depth of 5 feet and the soil around Building T-4914 will be excavated for an approximate volume of 185 cy to a depth of 2 feet (Army, 1995). The EPA concurred with the proposed excavation at the identified location on April 3, 1995 (EPA, 1995).

Initial excavation of the soil surrounding Buildings T-4913 and T-4914 was conducted in August 1995 and 860 cy of soil was removed. Confirmation samples were collected and showed chlordane concentrations above TCC. Additional 50 cy of soil was excavated in October 1995. A total of six confirmation samples were collected after the October 1995 excavation and no pesticides and PCBs were detected. Excavated soil was transported to the FOSTA and the excavation areas were backfilled with clean fill (HLA, 1996).

Results of confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on April 7, 1997 (EPA, 1997).

Cleanup Levels

The TCC for Site 15 was:

- Chlordane - 0.14 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 15. There are no additional actions found to be necessary for the soil at Site 15.

Document References

- Harding Lawson Associates (HLA), 1995. *Draft Final Site Characterization Site 15 – DEH Yard, Fort Ord, California*. February 22. AR# BW-1021
- HLA, 1996. *Confirmation Report Site 15 – Directorate of Engineering and Housing Yard, Fort Ord, California*. August 13. AR# BW-1515
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1995. *Approval Memorandum Proposed Interim Action Excavation Site 15 – Directorate of Engineering and Housing (DEH) Yard, Fort Ord, California*. March 6. AR# IAFS-139
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Approval Memorandum Site 15*. April 3. IAFS-112
- EPA, 1997. *EPA Response to Confirmation Report Site 15*. April 7. BW-1688

Site 20 – South Parade Ground, 3800 Motor Pool and 519th Motor Pool

Site Background

Site 20 is in the Main Garrison and consisted of the 9.5-acre South Parade Ground, the 27-acre troop training area west of the parade ground, the 6-acre 3800 Motor Pool, and the 20-acre 519th Motor Pool. Potential sources of contamination and areas of concern included the fenced storage compound and one former UST at the South Parade Ground; a potential landfill in the troop training area; oil/water separators, wash racks, grease racks, flammable materials storage area, and former UST at the 3800 Motor Pool; and vehicle repair facilities, flammable materials storage, wash rack, oil/water separator, and suspected UST at the 519th Motor Pool. The parcels associated with Site 20 that are included in the partial deletion are E15.1, L33.1, L33.2, and S1.6.

Remedial Investigation and Feasibility Study

The Remedial Investigation determined that the only debris disposed of at the site was construction debris in trenches at the suspected disposal sites. There was no evidence of additional suspected USTs. TPH was detected at a maximum concentration of 3,400 mg/kg near the former grease racks at the 3800 Motor Pool (HLA, 1995).

West and central grease racks at the 3800 Motor Pool was recommended for soil excavation because of the oil and grease concentrations above 500 mg/kg in soil, which may present a threat to groundwater. Based on groundwater modeling, results indicated that no significant impacts to the groundwater are expected from SRCs detected at Site 20. The ERA determined

that no complete exposure pathways for ecological receptors were identified at Site 20 because detected chemicals were beneath pavement (HLA, 1995).

Response Actions

The IA would address the concentrations of total recoverable petroleum hydrocarbons (TRPH) in the vicinity of the grease racks at the 3800 Motor Pool (HLA, 1995). The Army submitted an Approval Memorandum on June 1, 1995 for plug-in of Site 20 with the IAROD and proposed soil excavation. Approximately 250 cy soil in the vicinity of the grease racks would be excavated to a depth of 6 feet (Army, 1995). The EPA concurred with the proposed excavation at the identified location on June 8, 1995 (EPA, 1995).

Excavation of the soil surrounding the grease racks was completed with a total volume of excavated soil to be 320 cy. Excavated soil was stored in the FOSTA and, based on confirmation sampling, the excavation was backfilled with clean fill material (HLA, 1996).

Results of confirmation soil sampling indicated a maximum detected concentration of 220 mg/kg for oil and grease after excavation at the site. Results of confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on July 28, 1997 (EPA, 1997).

The FOSTA facility at the 519th Motor Pool was one of the approved destinations for soil excavated from IA sites. The FOSTA was designed as a bioremediation treatment facility constructed to accept soil from IA sites. Soil materials suitable for bioremediation were transported to the FOSTA, stockpiled and treated. Following the completion of treatment, the soils were subsequently excavated and transported to the OU2 Landfills for use as fill. The FOSTA consisted of a 200-ft by 200-ft rectangular lined and bermed treatment unit, consisting of a foundation layer, a high-density polyethylene (HDPE) liner, and operational layer. The treatment facility was operated from 1995 to 1998. The facility was removed and clean closure was completed in April 1999 as described in *Final Closure Report, Clean Closure Project, Former Fort Ord Soil Treatment Area (FOSTA), 519th Motor Pool, Fort Ord, California* (Uribe & Associates, 1999a).

The Underground Storage Tank Soil Remediation Area (USRA) was also located at the 519th Motor Pool, adjacent to the FOSTA. The USRA provided a low-cost enhanced bioremediation and aeration unit for treatment of soil containing petroleum hydrocarbons excavated during the removal of USTs as part of the base closure process at Fort Ord. The USRA consisted of a 200-ft by 100-ft rectangular lined and bermed treatment unit, consisting of a foundation layer, an HDPE liner, and operational layer. The USRA treatment unit was operated from 1995 to 1998. The facility was removed and clean closure was completed in April 1999 as described in *Final Closure Report, Clean Closure Project, Underground Storage Tank Remediation Area (USRA) 519th Motor Pool, Fort Ord, California* (Uribe & Associates, 1999b).

Cleanup Levels

TCCs for Site 20 were:

- TPHd – 500 mg/kg
- TPH as Oil and grease - 500 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 20. There are no additional actions found to be necessary for the soil at Site 20.

Document References

- Harding Lawson Associates (HLA), 1995. *Draft Final Site Characterization Site 20 – South Parade Grounds 3800 and 519th Motor Pools, Fort Ord, California*. May 1. AR# BW-1126
- HLA, 1996. *Interim Action Confirmation Report, Site 20 – South Parade Ground 3800 and 519th Motor Pools, Fort Ord, California*. July 1. AR# BW-1351
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1995. *Approval Memorandum Proposed Interim Action Excavation, Site 20 – South Parade Ground, 3800 and 519th Motor Pools, Fort Ord, California*. June 1. AR# IAFS-145
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Approval Memorandum Site 20*. June 8. AR# IAFS-116
- EPA, 1997. *EPA Response to Confirmation Report Site 20*. July 28. AR# BW-1251B
- Uribe & Associates, 1999a. *Final Closure Report, Clean Closure Project, Former Fort Ord Soil Treatment Area (FOSTA), 519th Motor Pool, Fort Ord, California*. Revision C. December. AR# BW-2057A
- Uribe & Associates, 1999b. *Final Closure Report, Clean Closure Project, Underground Storage Tank Remediation Area (USRA) 519th Motor Pool, Fort Ord, California*. Revision C. December. AR# BW-2057B

Site 21 – 4400/4500 Block Motor Pool East

Site Background

Site 21, the 4400/4500 Block Motor Pool East, was used for motor vehicle service, maintenance, and storage, and is located east of Eighth Avenue between Inter-Garrison and Gigling roads in the Main Garrison. Areas of concern at Site 21 include the oil/water separators located at the motor pool areas, a suspected gasoline spill in the decommissioned fuel facility, ponded areas where runoff wash water from utility racks accumulates, and an unpaved area near the canal discharge area, a catchment for rainwater and wash water from the adjacent motor pools (HLA, 1995). The parcel associated with Site 21 that is included in the partial deletion is F2.6.

Remedial Investigation and Feasibility Study

The Remedial Investigation recommended additional assessment of the soil conditions at the decommissioned fueling facility near Building 4493 due to the detections of TPH, benzene, and toluene detected in soil gas. Additional work near Building 4493 was recommended to be conducted under the Fort Ord UST program. Soil in the drainage canal and at the canal discharge area was recommended to be removed under the IAROD program due to

concentrations of antimony, arsenic, beryllium, cadmium, chromium, and lead exceeding the PRG and/or background values (HLA, 1995).

The SRE indicated that additional action at the canal discharge area might be necessary to address potential health risks at Site 21. Results of groundwater modeling indicate that no significant impacts to groundwater are expected from chemicals detected at Site 21. Results of the ERA indicate that exposures of ecological receptors to chemicals at Site 21 are of no concern.

Response Actions

The Army submitted an Approval Memorandum on February 27, 1995 for plug-in of site 21 with the IAROD and proposed excavation (Army, 1995). The Total estimated volume of excavated materials was approximately 90 cy. This estimate was based on excavating a 400-square foot area (20 feet by 20 feet) to a depth of 5 feet bgs (approximately 75 cy), the removal of an estimated 5 cy of sediment from the drainage canal, and the excavation of a 25 square-foot area (5 feet by 5 feet) to a depth of 2 feet (approximately 2 cy) around Surface Sample Location SS-21-08 (Army, 1995). The EPA concurred with the proposed action at the site on March 20, 1995 (EPA, 1995).

Excavation of soil at the discharge point of the canal was completed with a total of 154 cy to a depth of 7 feet. An adjacent excavation was completed to a depth of 3 feet for an approximate volume of 5 cy. Excavated soil was stored for treatment at the FOSTA and, based on confirmation sampling, the excavation was backfilled with clean material (HLA, 1996).

Results of confirmation soil sampling after excavation indicated levels below the TCC values: ND (antimony), 1.7 mg/kg (arsenic), 0.22 mg/kg (beryllium), 5.4 mg/kg (cadmium), and 26.1 mg/kg (lead). Results of confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on April 14, 1997 (EPA, 1997).

Cleanup Levels

The TCC for Site 21 were:

- Antimony - 27 mg/kg
- Arsenic - 0.87 mg/kg
- Beryllium - 0.39 mg/kg
- Cadmium - 8.1 mg/kg
- Lead - 240 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 21. There are no additional actions found to be necessary for the soil at Site 21.

Document References

- Harding Lawson Associates (HLA), 1995. *Draft Final Site Characterization, Site 21 – 4400/4500 Motor Pool, East Block, Fort Ord, California*. January 24. AR# BW-0970
- HLA, 1996. *Interim Action Confirmation Report Site 21 – 4400/4500 Motor Pool, East Block, Fort Ord, California*. July 10. AR# BW-1499
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1995. *Approval Memorandum Proposed Interim Action Excavation Site 21 – 4400/4500 Motor Pool, East Block, Fort Ord, California*. February 27. AR# IAFS-148
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Approval Memorandum Site 21*. March 20. AR# BW-1061
- EPA, 1997. *EPA Response to Confirmation Report Site 21*. April 14. AR# IAFS-161

Site 22 – 4400/4500 Block Motor Pool West

Site Background

Site 22, the 4400/4500 Block Motor Pool West, was used for motor vehicle service, maintenance, and parking, and is in the eastern portion of the Main Garrison. Potential areas of concern included 16 USTs, a fueling facility, maintenance shops, four grease racks, and three oil/water separators (Army, 2002). The parcels associated with Site 22 that are included in the partial deletion are L2.4.2, L32.2.1, L32.4.2, S1.1.3, and S1.3.1.

Remedial Investigation and Feasibility Study

The Remedial Investigation found concentrations of TRPH, total petroleum hydrocarbons as gasoline (TPHg), and TPHd up to 4,400 mg/kg near the fueling facility and former waste oil UST. Unknown hydrocarbons were detected at 8,500 mg/kg at the surface and oil grease was detected at 1,200 mg/kg at 5.5-foot sample near the former grease rack (HLA, 1995).

The results of the SRE indicated possible health risks associated with potential exposure to contaminants in soil. Results of groundwater modeling indicate that no significant impacts to groundwater are expected from SRCs detected at Site 22. The ERA determined that no complete exposure pathway for ecological receptors was identified at Site 22 because detected chemicals were beneath pavement or below the depth of plant roots. The Remedial Investigation recommended excavation and removal of soil at former grease rack under the IAROD (HLA, 1995).

Response Actions

The IA would address the concentrations of unknown extractable TPH and total oil and grease in the vicinity of the grease rack (HLA, 1995). The area under the grease rack was to be excavated to a depth of 5 feet and the area between the grease rack and the concrete pad to a depth of 10 feet for an estimated total volume of 250 cy. The Army submitted an Approval Memorandum on April 11, 1995 for plug-in of Site 22 with the IAROD and proposed excavation (Army, 1995). The EPA concurred with the proposed action at the site on June 13, 1995 (EPA, 1995).

Approximately 184 cy of soil was excavated from the proposed locations. Based on confirmation sampling, it was discovered that 150 cy of fill used following the removal of a UST in 1991 was contaminated with high levels of TRPH. An investigation was conducted to determine the extent of contamination from the backfill and from an adjacent surface spill. An additional 1,055 cy of

soil was excavated as a result of this investigation and additional confirmation sampling. The original excavated soil was stored in the FOSTA for treatment. Additional excavated soil with concentrations of TPHd, total petroleum hydrocarbons as motor oil (TPHmo), and TRPH above 500 mg/kg was transported to USRA for biotreatment. Soil with concentrations between 100 and 500 mg/kg was used in the foundation later of the OU2 Landfills engineered cover system, and soil with concentrations less than 100 mg/kg was used as backfill. The excavation was backfilled with clean material (HLA, 1996).

Results of confirmation sampling after excavation indicated left-in-place levels below the TCC values. The results of the confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on September 19, 1996 (EPA, 1996).

Cleanup Levels

The TCC for Site 22 were:

- Unknown extractable TPH - 500 mg/kg
- Total oil and grease - 500 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 22. There are no additional actions found to be necessary for the soil at Site 22.

Document References

- Harding Lawson Associates (HLA), 1995. *Draft Final Site Characterization Site 22 – 4400/4500 Motor Pool, West Block, Fort Ord, California*. June 9. AR# BW-1523
- HLA, 1996. *Interim Action Confirmation Report Site 22 – Motor Pool, West Block, Fort Ord, California*. May 22. AR# IAFS-131
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1995. *Approval Memorandum Proposed Interim Action Excavation Site 22 – 4400/4500 Motor Pool, West Block, Fort Ord, California*. April 11. AR# IAFS-147
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Approval Memorandum Site 22*. June 13. AR# IAFS-117
- EPA, 1996. *EPA Response to Confirmation Report, Site 22*. September 19. AR# IAFS-217

Site 24 – Old Directorate of Housing (DEH) Yard

Site Background

Site 24 was the location of the former DEH Yard and a former plant nursery within the Main Garrison. Areas within Site 24 that may have been potential sources of contamination included

a maintenance facility, a grease rack, drum and asphalt storage areas, aboveground tanks, and the nursery (Army, 2002). The parcels associated with Site 24 that are included in the partial deletion are L19.2, L32.3, L33.1, and S1.4.

Remedial Investigation and Feasibility Study

The Remedial Investigation discovered several corroded drums buried at a depth of 5 to 6 feet. One drum was tested to contain heavy motor oil. A Time-Critical Removal Action (TCRA) was conducted in 1994 (Army, 1994b). Following the removal of drums, concentrations of VOCs, SOCs, and unknown hydrocarbons in the soil beneath the drums was detected (HLA, 1995). Subsequent site characterization found that the concentrations exceeded their respective PRGs in the soil samples taken from the bottom of the excavation. In addition, pesticides were detected in surface soil in the nursery area and oil and grease and unknown hydrocarbons at locations of former ASTs and the grease rack. In addition, unknown hydrocarbons in the chromatographic range of diesel fuel were detected in groundwater at the maximum concentrations of 150 µg/L (HLA, 1996) and continued groundwater monitoring at MW-24-01-180, -02-180, and -03-180 was recommended to confirm the presence of unknown hydrocarbons.

The results of the SRE indicated possible health risks associated with potential exposure to contaminants in soil. Groundwater modeling indicated that no significant impacts to groundwater are expected from the SRCs at the site. The ERA indicated that adverse impacts are unlikely. Excavation and removal of soil under the IAROD was recommended for Site 24 (HLA, 1996).

Response Actions

The IA would address the chemicals at the former AST and grease rack, shallow soils in the central part of the site, and soil in the vicinity of the TCRA. Three areas were to be excavated at the site (24A, 24B, and 24C) with a total excavated volume to be 1,445 cy. The first excavation at the location of the former AST and grease rack to a depth of 5 feet and 280 cy, the second for the pesticide-contaminated surface soil to a depth of 1 foot and 385 cy, and the third at the location of the time-critical removal of the drums to be 15 feet deep and 680 cy (Army, 1996). The Army submitted an Approval Memorandum on February 7, 1996 for plug-in of Site 24 with the IAROD and proposed excavation (Army, 1996). The EPA concurred with the proposed action on April 9, 1996 (EPA, 1996).

Approximately 380 cy was excavated at the first location. Based on confirmation sampling, the excavated soil was used at the OU2 Landfills for the foundation layer in the engineered cover system. 500 cy was excavated at the second location in two phases based on confirmation sampling. Based on confirmation sampling, 400 cy of excavated soil was transported to the FOSTA and 100 cy was used at the OU2 Landfills for the foundation layer in the engineered cover system. 700 cy was excavated at the third location. Based on confirmation sampling, 560 cy exceeded the TPH TCC and was disposed of at the FOSTA. The remaining 140 cy was used at the OU2 Landfills for the foundation layer in the engineered cover system. Based on confirmation sampling, all three excavation locations were backfilled with clean fill material (HLA, 1997).

Results of confirmation sampling after excavation indicated left-in-place levels below the TCC values. The results of the confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1997).

The EPA concurred with the IA Confirmation Report on April 14, 1997 (EPA, 1997).

The three groundwater monitoring wells (MW-24-01-180, -02-180, and -03-180) were sampled for VOCs and TPH as diesel and motor oil as part of the Basewide Groundwater Monitoring Program until 2003. In the *Annual Report of Quarterly Monitoring, October 2002 through September 2003* (MACTEC, 2004), it was recommended that further sampling be discontinued and the monitoring wells be destroyed. The three monitoring wells were destroyed in 2011.

Cleanup Levels

The TCC for Site 24 were:

- Petroleum hydrocarbons - 500 mg/kg
- Pesticides and VOCs - varied as presented in the *Interim Action Confirmation Report, Site 24 – Old DEH Yard* (HLA, 1997)

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 24. There are no additional actions found to be necessary for the soil at Site 24.

Document References

- Harding Lawson Associates (HLA), 1994. *Removal Action Report, Time Critical Removal Action at Site 24 – The Old DEH Yard, Fort Ord, California*. October 19. AR# BW-1692
- HLA, 1996. *Draft Final Characterization Site 24 – Old DEH Yard, Fort Ord, California*. March 22. AR# BW-1367
- HLA, 1997. *Interim Action Confirmation Report Site 24 – Old DEH Yard, Fort Ord, California*. January 23. AR# IAFS-135
- U.S. Department of the Army (Army), 1994a. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1994b. *Action Memorandum, Request for Time Critical Removal Action at Site 24 – The Old DEH Yard, Fort Ord, California*. July 13. AR# BW-0657B
- Army, 1996. *Approval Memorandum Proposed Interim Action Excavation, IA Areas 24A, 24B, and 24C, Site 24 – Old DEH Yard, Fort Ord, California*. February 7. AR# IAFS-181
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1994. *EPA Response to Time Critical Action Memorandum Site 24*. BW-0657A
- EPA, 1996. *EPA Response to Approval Memorandum for Proposed Interim Action Excavation IA Area 24A, 24B, 24C and 41A*. April 9. AR# IAFS-143
- EPA, 1997. *EPA Response to Subject: Remedial Action Completion, Operable Unit #4, Site 24 – Old DEH Yard, Former Fort Ord, California*. April 14. AR# IAFS-160
- MACTEC, 2004. *Draft Annual Report of Quarterly Monitoring October 2002 through September 2003, Former Fort Ord, California*. March 2. AR# BW-2277

Site 30 – Driver Training Area

Site Background

Site 30, the Driver Training Area, was a partially developed parcel in the East Garrison. Former facilities at the site representing potential areas of concern included a former grease rack with stained surface soils, a former gasoline station with two USTs, and an abandoned wash rack (Army, 2002). The parcel associated with Site 30 that is included in the partial deletion is L23.3.1.

Remedial Investigation and Feasibility Study

The Remedial Investigation found concentrations of unknown TPHd at 3,300 mg/kg in the surface soil sample collected beneath the former grease rack. Chloride and thallium contamination was detected in groundwater.

Results of the SRE indicated that the health risks from possible exposure to SRCs are acceptably low. Results of groundwater modeling indicated the unknown TPH concentrations might pose a threat to groundwater quality. The ERA indicated that exposures of ecological receptors to chemicals at Site 30 are expected to be negligible (HLA, 1994).

Monitoring well MW-30-01-180 was recommended to be added to the Basewide Groundwater Monitoring Program for further investigation due to TDS exceeding federal and California MCLs, thallium exceeding the primary federal MCL, and chloride exceeding the secondary federal MCL. Soil excavation was recommended due to the localized soil contamination at the grease rack (HLA, 1994).

Response Actions

The IA would address the detected concentration of unknown TPH at the location of the former grease rack (IA Area 30A). The estimated volume of excavated soil at the location of the former grease rack was to be approximately 150 cy to a depth of 5 feet (Army, 1995). The U.S. Army submitted an Approval Memorandum on March 7, 1995 for plug-in of Site 24 with the IAROD and proposed excavation (Army, 1995). The EPA concurred with the proposed action at the site on April 3, 1995 (EPA, 1995).

Soil was excavated to a depth of 5.5 feet at the proposed location. Based on confirmation sampling, the excavated soil was treated in the FOSTA and the excavations backfilled with clean fill material (HLA, 1996).

Results of confirmation sampling after excavation indicated left-in-place levels at a maximum of 140 mg/kg for TRPH, below the TCC value. The results of the confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1996).

The EPA concurred with the IA Confirmation Report on April 14, 1997 (EPA, 1997).

Monitoring well MW-30-01-180 was last sampled in 1995 and was last measured for water level in 2003. Because TRPH was below laboratory detection limits, this well was recommended to be destroyed in the *Annual Report of Quarterly Monitoring, October 2002 through September 2003* (MACTEC, 2004) since sampling was no longer conducted and water level measurements are unnecessary. Well destruction was completed in September 2006.

Cleanup Levels

The TCC for Site 30 was:

- Unknown TPH - 500 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 30. There are no additional actions found to be necessary for the soil at Site 30.

Document References

- Harding Lawson Associates (HLA), 1994. *Draft Final Site Characterization Site 30 – Driver Training Area, Fort Ord, California*. December 21. AR# BW-0909
- HLA, 1996. *Confirmation Report, Site 30 – Driver Training Area, Fort Ord, California*. February 20. AR# BW-1514
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1995. *Approval Memorandum Proposed Interim Action Excavation, IA Area 30A, Site 30 – Driver Training Area, Fort Ord, California*. March 7. AR# IAFS-140
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Site 30-Driver Training Area 30A, Proposed Interim Action for Contaminated Surface Soil Remediation, Approval Memorandum*. April 3. AR# IAFS-113
- EPA, 1997. *EPA Response to Confirmation Report, Site 30-Driver Training Area*. April 14. AR# IAFS-164
- MACTEC, 2004. *Draft Annual Report of Quarterly Monitoring October 2002 through September 2003, Former Fort Ord, California*. March 2. AR# BW-2277

Site 32 – East Garrison Sewage Treatment Plant

Site Background

Site 32, the East Garrison Sewage Treatment Plant in the northern portion of the East Garrison consisted of sludge beds, a percolation pond, and Dotten-sedimentation tanks. Potential contaminants included TPH as gasoline, TPHd, VOCs, metals, fecal coliform bacteria, and nitrogen (Army, 2002). The parcel associated with Site 32 that is included in the partial deletion is E11b.3.

Remedial Investigation and Feasibility Study

Remedial Investigation at the site identified SRCs such as TPH and pesticides at the sewage outfalls and metals at the percolation ponds. The SRE indicated that additional action at the site was necessary to address potential health risks. Groundwater model results indicate that no significant impacts to the groundwater are expected from SRCs. The ERA indicated that adverse impacts to flora and fauna are unlikely (HLA, 1997).

It was recommended that sewage residue and soil from the sewage outfall and the northeastern cell of the percolation pond be removed and placed in the OU2 Landfill (HLA, 1997). They are to be performed under the IAROD. From the investigation, it was also recommended continuing groundwater monitoring at monitoring wells MW-32-01-A, MW-32-02-A, MW-32-03-A, and FO-32 for fecal coliform, nitrate, and orthophosphate via the Basewide Groundwater Monitoring Program (HLA, 1997).

Response Actions

The IA would address the contamination in the percolation ponds and sewage outfall (IA Areas 32A and 32B). The estimated volume of excavated soil at the location of the sewage outfall was to be approximately 1,420 cy to a depth of 8 feet and the estimated volume of 355 cy at the percolation pond to a depth of 2 feet. The Army submitted an Approval Memorandum on April 24, 1997 for plug-in of Site 32 with the IAROD and proposed excavation (Army, 1997a). The EPA concurred with the proposed action at the site in May 1997 (Army, 1997b).

A total of 2,300 cy of soil was excavated at the sewage outfall in two phases based on confirmation sampling and a total of 700 cy at the percolation ponds. Based on confirmation sampling, the excavated soil was used at the OU2 Landfills for the foundation layer in the engineered cover system (HLA, 1998).

Results of confirmation sampling after excavation indicated left-in-place levels below all TCC values. The results of the confirmation sampling and subsequent risk evaluation indicated that no further threat to human health, the environment, or groundwater was anticipated at this site and no further investigation or remediation was recommended (HLA, 1998).

The EPA concurred with the IA Confirmation Report on March 19, 1998 (EPA, 1998).

Draft Annual Report of Quarterly Monitoring October 1998 through September 1999, Fort Ord, California (HLA, 2000) described MW-32-01 was obstructed by a stuck sampling bailer, and FO-32 (last measured for water level in 1999) was not mentioned. MW-32-01-A was destroyed in 2001 (HLA, 2000). MW-32-02-180 and MW-32-02-180 were recommended to be removed from the Basewide Groundwater Monitoring Program in 2002 (Harding ESE, 2002); they were destroyed in 2006.

Cleanup Levels

The TCCs for Site 32 were:

- Unknown TPH – 500 mg/kg
- Aldrin - 0.011 mg/kg
- Beryllium - 0.39 mg/kg
- Chlordane - 0.14 mg/kg
- Dieldrin - 0.011 mg/kg
- 4,4-DDE - 0.53 mg/kg
- 4,4-DDD - 0.74 mg/kg
- 4,4-DDT - 0.53 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 32. There are no additional actions found to be necessary for the soil at Site 32.

Document References

- Harding ESE, 2002. *Draft Final Annual Report of Quarterly Monitoring, October 1999 through September 2000, Former Fort Ord, California*. October 14. AR# BW-2086P
- Harding Lawson Associates (HLA), 1997. *Draft Final Site Characterization Site 32 – East Garrison Sewage Treatment Plant, Fort Ord, California*. January 28. AR# BW-1566
- HLA, 1998. *Interim Action Confirmation Report, Site 32 – East Garrison Sewage Treatment Plant, Fort Ord, California*. March 5. AR# IAFS-203
- HLA, 2000. *Draft Annual Report of Quarterly Monitoring, October 1998 through September 1999, Fort Ord, California*. March 7. AR# BW-2064
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1997a. *Approval Memorandum Proposed Interim Action Excavation, IA Areas 32A and 32B, Site 32 – East Garrison Sewage Treatment Plan, Fort Ord, California*. April 24. AR# IAFS-168
- Army, 1997b. *Public Notice: Army announces regulatory agency approval on the Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, California, Site 1, Site 32 and Site 39A*. May 20. AR# IAFS-171
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1998. *EPA Response to Confirmation Report Site 32-East Garrison Sewage Treatment Plant*. March 19. AR# IAFS-208

Site 34 – Fritzsche Army Airfield Fueling Facility

Site Background and History

The FAAF (now the Marina Municipal Airport) is located on the north side of the former Fort Ord adjacent to the City of Marina. Construction of FAAF was completed in the early 1960s and it served as the general airfield for Fort Ord. Site 34 consists of Wash Rack 516, Wash Aprons 512, 517, 525, and 534, and their associated oil/water separators. Wash Rack 516, at Building 509, was used exclusively for vehicle cleaning. Rinsate from the wash rack flowed to a nearby oil/water separator and ultimately to the publicly owned treatment works (POTW) or sewage treatment system. The four wash aprons were used for helicopter cleaning. Rinsate collected on the aprons and flowed to nearby oil/water separators. Effluent from the oil/water separators also ultimately reached the POTW.

Several military companies performed aircraft maintenance at FAAF and the DOL employed a civilian maintenance force at the FAAF in Buildings 533 and 535, near Wash Apron 534. According to a long-term FAAF employee, paint was routinely chemically stripped from aircraft over a storm drain at Wash Apron 534, and this practice reportedly continued from the 1960s until a new paint booth was built at Building 535 in the late 1980s. Stripping rinsate entered the drainage collection system through the drain and was routinely allowed to enter the oil/water separator. Paint stripper used at the time reportedly contained a variety of compounds, the most common of which was methylene chloride (HLA, 1994).

In August 1987, Fort Ord personnel discovered a loss of approximately 3,200 gallons of gasoline from a 5,000-gallon UST near Building 511. The UST was removed in October 1988 and, because contaminated soil extended under Building 511, the building was demolished at the same time. The total volume of soil excavated was approximately 2,500 cy, of which 500 cy were considered contaminated. The excavated soil containing petroleum hydrocarbons was aerated between October and December 1988 under a permit issued by the Monterey Bay Unified Air Pollution Control District. The treated soil was moved to a soil borrow pile at FAAF (HLA, 1994).

Because elevated levels of TPH remained in the native soil, a soil vapor extraction (SVE) system was constructed and operated intermittently from April 1989 through December 1991. Approximately 11,000 pounds of TPH were removed during SVE system operation (HLA, 1994).

The parcels associated with Site 34 that are included in the partial deletion are L5.1.6, L5.1.7, L5.1.9, L5.1.10, and S2.1.4.2.

Remedial Investigation and Feasibility Study

The field investigation at Site 34 included an initial soil gas survey at the four helicopter wash aprons, drilling and sampling two soil borings at each wash apron and one soil boring at the vehicle wash rack, and laboratory analyses of the soil samples. The primary objective of the soil gas surveys was to screen for VOCs in subsurface soil and to determine soil boring locations. Upon completion of the soil gas surveys, one soil boring was drilled to approximately 20 feet bgs at each wash apron at the location with the highest soil gas chemical concentrations and one soil boring was drilled near each oil/water separator (HLA, 1994).

No organic compounds were reported above laboratory detection limits in any soil samples submitted from borings drilled at the four helicopter wash aprons. Soil samples collected from the soil boring drilled at Wash Rack 516 contained organic compounds above laboratory detection limits (HLA, 1994).

Only reportable concentrations of arsenic, lead, selenium, thallium, beryllium, chromium, copper, nickel, and zinc were detected in the soil samples submitted for inorganic analysis. All reported concentrations were below PRGs except for arsenic and chromium (no PRG established). However, arsenic detected concentrations were below the background threshold values. All total chromium sample results were detected below the shallow background (24 mg/kg) and below the deep background threshold value (16.6 mg/kg) except for one sample at 15.5 feet (21.4 mg/kg). However, the bracketing samples at 10.5 and 20.5 feet in the same boring both had chromium concentrations of 12.5 mg/kg and there was no known source of chromium at the site. All chromium detections were therefore considered to represent background (HLA, 1994).

An SRE was conducted based on the site characterization data (HLA, 1994). The results of the SRE indicated health risks from possible exposure to SRCs in soil are acceptably low. The results of a qualitative analysis indicate that the inorganic chemicals evaluated at Site 34 are not expected to impact groundwater if left in place at maximum detected site concentrations. Based on an ecological receptor exposure analysis conducted as part of the quantitative basewide ERA for Fort Ord, exposures of ecological receptors to chemicals at Site 34 are expected to be negligible (HLA, 1994).

Based on the results of the site characterization, no additional investigation was recommended at the four helicopter wash aprons. Excavation of shallow subsurface soil contaminated with hydrocarbons at Wash Rack 516 was recommended (HLA, 1994).

In 2020, the [Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California](#), was developed in response to requests from EPA and DTSC for additional information regarding the potential presence of PFAS compounds at former Fort Ord. An additional area of Site 34 has been identified and recommended for additional soil investigation for PFAS contamination (Ahtna, 2020). Additional investigation is recommended at the Building 507 storm drain discharge area because of the presence of an apparent foam suppression system and the reported accidental discharge of potential aqueous film-forming foam (AFFF) at one hanger. Cleanup after the accidental discharge could have resulted in AFFF being discharged to surface drainage channels or the sanitary sewer system, and a suspected release of PFAS at stormwater infiltration areas south of Building 507. Additional soil investigation is recommended at the location (Ahtna, 2020). As this location is not co-located with any previously identified Site 34 areas, Site 34 and associated parcels are included in the partial deletion. The location of the additional PFAS investigation is within parcels S2.1.6 and L5.1, which remain on the NPL.

Response Actions

The proposed excavation area was designated 34A. The Army submitted an Approval Memorandum on February 2, 1995 for the proposed excavation at IA Area 34A (Army, 1995) which was later supplemented by an addendum (HLA, 1997). The EPA concurred with the proposed action on February 15, 1995 (EPA, 1995). An IA excavation that included the removal of the oil/water separator at Wash Rack 516 and the excavation of approximately 200 cy of contaminated soil was completed in July 1996. A subsurface sampling program was performed in April 1997. Approximately 2,000 cy of contaminated soils were excavated from the site in August and November of 1997. Stockpiled soils associated with IA Site 34A were transferred to the OU2 Landfills and the excavation was backfilled in December 1997 (Uribe, 1998).

The EPA concurred with the IA Confirmation Report on February 5, 2002 (EPA, 2002).

Cleanup Levels

The TCCs for SRCs at Site 34 were:

- TPH – 500 mg/kg
- Ethylbenzene – 830 mg/kg
- Xylenes (total) – 130 mg/kg
- Selenium – 340 mg/kg
- Thallium – 4.7 mg/kg

Results of the IA confirmation sampling indicate soils with concentrations of SRCs above their respective TCCs were removed, and results of the confirmation sampling and subsequent risk evaluation indicate no significant threats to human health, the environment, or groundwater are anticipated at Site 34. Therefore, no further investigation or remediation is recommended (Uribe, 1998).

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Site 34.

Determination that the Criteria for Deletion have been Met

The implemented remedy achieves the degree of cleanup or protection specified in the IAROD for the deletion parcels and no further Superfund response is needed to protect human health and the environment.

Document References

- Ahtna Environmental, Inc. (Ahtna), 2020. *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California*. February 27. AR# OU2-722A
- Harding Lawson Associates (HLA), 1994. *Draft Final Site Characterization – Part 1, Site 34 – Fritzsche Army Airfield Fueling Facility, Fort Ord, California*. May 23. AR# BW-0568
- HLA, 1997. *Approval Memorandum: Addendum to Fort Ord Site 34 Interim Action Approval Memorandum*. November 20. AR# IAFS-197
- Uribe & Associates (Uribe), 1998. *Final Interim Action Confirmation Report, Site 34 – Fritzsche Army Airfield Fueling Facility, Fort Ord, California*. September 8. AR# IAFS-215
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1995. *Approval Memorandum, Proposed Interim Action Excavation, Interim Action Area 34A, Site 34, Fritzsche Army Airfield Fueling Facility, Fort Ord, California*. February 2. AR# IAFS-138
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to Site 34 - Fritzsche Army Airfield Fueling Facility Area 34A Proposed Interim Action for Contaminated Surface Soil Remediation Approval Memorandum*. February 15. AR# IAFS-106
- EPA, 2002. *Letter from EPA to the Army regarding Final Interim Action Confirmation Report, Site 34, FAAF Fueling Facility*. February 5. AR# IAFS-215C

Site 34B - Former Burn Pit

Site Background and History

Site 34B is in the FAAF area. The location of a former burn pit at FAAF was identified in 1995 by a former range control officer. According to the range control officer, the burn pit may have been used a few times a year as a firefighter training area by dispensing gasoline or other fuels into the pit, lighting the fuels, and providing an opportunity for firefighters to practice extinguishing the fire. No historical records about the burn pit were found. After aerial photographs were reviewed, site was inspected subsequently, and the potential presence of the burn pit was confirmed. During the site inspection, concrete debris was observed north of the burn pit, suggesting a possible previously unknown disposal site (Harding ESE, 2001). A review of the historical aerial photographs indicates that the former burn pit was not present in 1949 but was present in 1986. While the former burn pit is likely to have been established after 1949, it had not been used since sometime before 1971 (Ahtna, 2020).

The parcel associated with Site 34B that are included in the partial deletion is S2.1.1.

Remedial Investigation and Feasibility Study

The possible presence of the burn pit was discussed during a site visit in 1995, however no historical records about burn pit operations were located. Field investigation was completed in 1998 and included the following activities (Harding ESE, 2001):

- A geophysical survey to identify areas where buried metal (e.g. drums) may be present,
- Excavation of one approximately 100-foot-long trench along the center line of the former burn pit,
- Collection of three soil samples for chemical analysis, and
- Analysis of soil samples for VOCs, SOCs, TPH, primary pollutant metals, dioxins, and furans.

Elevated TPH, dioxin, and furan concentrations were detected in shallow surface soil (0 to 5 feet bgs). With the exception of lead, arsenic, and chromium, concentrations of all priority pollutant metals detected in soil samples were below Fort Ord PRGs. Lead was the only metal detected above the PRG and established maximum threshold background concentrations at Fort Ord. It was found that contaminant concentrations decreased with depth.

An SRE was conducted based on the data collected in the site characterization. The SRE found that dioxins, furans (represented by total 2,3,7,8-tetrachlorodibenzo-p-dioxin-toxic equivalent [TCDD-TE] concentrations), and TPHmo are the only chemicals contributing substantially to an excess cancer risk above 10^{-6} and lead may contribute substantially to a hazard index exceeding the RAO criterion. Given the depth to groundwater at the site and the presence of soil contaminants only in the very-near surface, no potential impacts to groundwater are expected. However, cleanup of soils to the appropriate TCC for TPHmo is expected to prevent adverse impacts to groundwater due to leaching from soil. The ERA concluded that there are no expected significant impacts to ecological species at the site (Harding ESE, 2001).

Based on the results of the investigation, further work was recommended at Site 34B. Soils with levels of TPH, lead, and TCDD-TE exceeding the PRGs at two sample locations were recommended to be excavated as part of Interim Action Site 34 under the IAROD (Harding ESE, 2001).

In 2020, the [Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California](#), was developed in response to requests from EPA and DTSC for additional information regarding the potential presence of PFAS compounds at former Fort Ord. A review of Site 34B historical aerial photographs indicates the burn pit was not present in 1949 but was present in 1986. While the burn pit was likely established after 1949, it had not been used since sometime before 1971. This information suggests this site may have been a temporary training area that was used while the FAAF was under construction in the early 1960s and before the FAAF Fire Drill Area (FDA) was established in 1962. Because the burn pit was not used after 1971 and AFFF was not used at Army installations before 1973, there is no suspected release of AFFF at this location; therefore, this site was eliminated from further PFAS investigation (Ahtna, 2020). As there is no recommendation for further PFAS investigation, the site is included in the partial deletion.

Response Actions

The Army submitted an Approval Memorandum on August 27, 2002 for the proposed excavation at IA Area 34B (Army, 2002a and 2002b). The EPA concurred with the proposed action on October 3, 2002 (EPA, 2002a and 2002b). Interim Action response was conducted in

2002 at Site 34B in two phases: pre-excavation waste profile sampling, and excavation and confirmation sampling. Eight pre-excavation composite soil samples were collected and analyzed to determine if the excavated soil would meet the criteria for disposal at the OU2 Landfills before the excavation was conducted. After the analytical results indicated the soil from the Former Burn Pit would meet the criteria for disposal, excavation was performed in October 2002. A total of 740cy of soil to a depth of 5 feet bgs was excavated and placed at the OU2 landfills.

A total of 12 confirmation samples were collected in two rounds following excavation and analytical results were all below the TCCs, indicating that remediation is complete (Shaw, 2003).

The EPA approved the Interim Action Confirmation Report, Interim Action Area 34B, Former Burn Pit on January 10, 2012 (EPA, 2012).

Cleanup Levels

TCCs for Site 34B SRCs are:

- Dioxin and Furan - 1.2E-06 mg/kg
- Lead - 3.7 mg/kg
- TPH as motor oil - 500 mg/kg

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Site 34B.

Statement of Action Complete

The implemented remedy at Site 34B achieves the degree of cleanup or protection specified in the IAROD for the deletion parcels and no further Superfund response is needed to protect human health and the environment.

Document References

- Ahtna Environmental, Inc. (Ahtna), 2020. *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California*. February 27. AR# OU2-722A
- Harding ESE, 2001. *Draft Data Summary Report, FAAF Three Sites, Former Fort Ord, California*. June 29. AR# BW-2097
- Shaw Environmental, Inc. (Shaw), 2003. *Interim Action Confirmation Report, Interim Action Area 34B, Former Burn Pit, Site 34 – Fritzsche Army Airfield Defueling Area Former Fort Ord, California*. September 22. AR# IAFS-224
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 2002a. *Approval Memorandum, Proposed Interim Action Excavation, IA Area 34B, Site 34, Fritzsche Army Airfield Defueling Area, Fort Ord, California*. August 27. AR# IAFS-222
- Army, 2002b. *Army's response to EPA regarding the Approval Memorandum, Proposed Interim Action Excavation, IA Area 34B, Site 34, Fritzsche Army Airfield Defueling Area, Fort Ord, California*. October 2. AR# IAFS-222G

- U.S. Environmental Protection Agency (EPA), 2002a. *Site 34 – Fritzsche Army Airfield Defueling Area, Proposed Interim Action Excavation at Area IA Area 34B, Approval Memorandum dated August 27, 2002*. September 12. AR# IAFS-222A
- EPA, 2002b. EPA response to the Army regarding the *Approval Memorandum, Proposed Interim Action Excavation at Area IA Area 34B, Site 34 – Fritzsche Army Airfield Defueling Area, Former Fort Ord*. October 3. AR# IAFS-222E
- EPA, 2012. *EPA Response to Interim Action Confirmation Report, Interim Action Area 34B, Former Burn Pit, Site 34 – Fritzsche Army Airfield Defueling Area, Former Fort Ord, California, September 2003*. January 10. AR# IAFS-224F

Site 39A – East Garrison Ranges

Site Background

The East Garrison Ranges are on the west side of the East Garrison. The ranges included three small-bore shooting ranges (EG-1, EG-2, and EG-3), a skeet range, and a target area that appeared to have been part of a decommissioned moving target range. Weapons use was limited to pistols (.45 caliber or less) at Ranges EG-1 and EG-2, and to small-bore (.22 caliber) rifles at Range EG-3. Bullets were fired at targets 25 or 50 meters away and became embedded in the hillsides at the back of the range. The skeet range was primarily a recreational shooting range for trap and skeet. Potential contaminants were arsenic, antimony, copper, and lead associated with spent ammunition, and polynuclear aromatic hydrocarbons (PAHs) from clay targets that contain 32 percent petroleum pitch (asphalt) (Army, 2002). The parcels associated with Site 39A that are included in the partial deletion are L20.2.2, L20.21.2, L20.22, L23.3.1, L23.3.3.1, and L35.6.

Remedial Investigation and Feasibility Study

The field investigation of Site 39A was conducted at each of four identified study areas: Ranges EG-1 and EG-2, Range EG-3, the Moving Target Range, and the Skeet Range. The study areas were investigated in two phases. Phase I, conducted between October 31 and November 16, 1994, included (HLA, 1997a):

- Estimating the distribution of spent ammunition at the four study areas;
- Assessing the distribution of clay pigeon target fragments at the Skeet Range; and
- Collecting soil samples at the Skeet Range and analyzing them for selected metals, PAHs, and pH.

Phase II, conducted between April 25 and 26 and August 4, 1995, included (HLA, 1997a):

- Collecting soil samples at the firing line at Range EG-1 and analyzing them for selected metals and pH to evaluate the potential presence of contaminants in soil where weapons were discharged;
- Collecting additional soil samples at the Skeet Range and analyzing them for selected metals, PAHs, and pH; and
- Collecting soil samples from below the asphalt road surfaces in the former tent city area of the Skeet Range and analyzing them for PAHs to assess the potential presence of PAHs from sources other than the clay pigeons.

Results indicated that zones of moderate to heavy distribution of spent ammunition occurred as relatively small discrete areas in Ranges EG-1, EG-2, and EG-3 and the Skeet Range. Vertical distribution of spent ammunition is limited to the upper few inches of soil, even in areas of heavy surface coverage. Accumulations of up to three feet in thickness of clay pigeon fragments in

some areas were also observed in the Skeet Range. For the Moving Target Range, both vertical and horizontal estimates of coverage indicate that distribution is very sparse, and therefore, soil contamination as a result is unlikely (HLA, 1997a).

For analytical results for soil samples, only antimony and lead were detected above their respective TCCs and arsenic was detected at concentrations above the Fort Ord maximum background concentration. Four PAHs (indeno(1,2,3-cd)pyrene, benzo(b)fluoranthene, benzo(a)pyrene, and benzo(a)anthracene) were detected in one or more soil samples at concentrations exceeding their respective PRGs (HLA, 1997a).

The screening risk assessment determined antimony, arsenic, lead, and four PAHs, exceeding the RAO criterion, may contribute substantially to cancer risk estimate and additional action at the site was necessary to mitigate potential health risks. Impacts to groundwater were not assessed as part of the site characterization; however, no potential impacts to groundwater were expected. Results of the ecological assessment indicated IA activities should have no adverse impacts to ecological receptors and achievement of the RAO should eliminate potential impacts to ecological receptors from contaminants in the soil (HLA, 1997a). Based on the investigation, no further work is recommended for the Moving Target Range. Excavation and removal of soil under the IAROD were recommended for the following areas (HLA, 1997a):

- Six areas of Ranges EG-1 and EG-2;
- Two localized areas containing 1 to 10 percent surface coverage on the backstop area of Range EG-3;
- Surface soil in about half the downrange (north) portion of the Skeet Range, where the soil contained lead and arsenic above their respective PRGs; and
- Surface and subsurface soil in one area containing PAHs in soil above those PRGs, of the Skeet Range.

Response Actions

The IA would address the contamination of metals and PAH at the ranges. The estimated total volume of excavated soil at Site 39A was to be 5,530 cy; 1,000 cy at Firing Range EG-1, 50 cy at Firing Range EG-2, and 4,480 cy at the skeet range. The Army submitted an Approval Memorandum on January 10, 1997 for plug-in of Site 39A with the IAROD and proposed excavation (Army, 1997) which was later supplemented by an addendum (HLA, 1997b). The EPA concurred with the proposed action at the site on February 10, 1997 (EPA, 1997).

Excavation was completed in two phases at Site 39A based on confirmation sampling. Approximately 5,500 cy of soil was excavated in the first phase at several identified locations throughout the site. The excavated soil was stockpiled at the site and then placed at the OU2 Landfills. Phase 2, over-excavation of specific locations based on confirmation sampling, was completed with an additional approximately 1,000 cy of soil excavated. This soil was also stockpiled and then placed at the OU2 Landfills (HLA, 1998).

Spent ammunition was to be removed from the excavated soil to be recycled prior to placement of the soil at the OU2 Landfills. As such, prior to excavation surface lead shot was removed and recycled and prior to soil placement in the OU2 Landfills, bullets were removed through screening. Results of confirmation sampling after excavation indicated left-in-place levels below all TCC values. (HLA, 1998). The EPA concurred with the IA Confirmation Report for Site 39A on February 5, 2002 (EPA, 2002).

HA-80 and HA-85 within Site 39A were identified during site investigation activities conducted under the former Fort Ord Basewide Range Assessment (BRA) program. HA-80 and HA-85 are located close to the center of Site 39A. Site investigation sampling was first conducted within HA-80 and HA-85 in August 2001 and elevated lead concentrations were found. Additional characterization sampling was conducted to further evaluate the extent of elevated lead concentrations and areas were identified for remediation (Army, 2005). The EPA concurred with the proposed action at HA-80 and HA-85 on June 7, 2005 (EPA, 2005). An estimated volume of 600 cy to a depth of 1 foot bgs of soil would be excavated at HA-80 and 300 cy to a depth of 1 foot bgs from HA-85.

Excavation at HA-80 was completed in three phases based on confirmation sampling and one phase at HA-85. In total, approximately 600 cy was excavated from the two sites. Based on confirmation sampling, the soil was treated as hazardous waste and disposed of at the Kettleman Hills Hazardous Waste Facility (MACTEC, 2006).

The maximum left-in-place detected concentrations based on confirmation sampling were 2.55 mg/kg (antimony), 45.9 mg/kg (copper), and 223 mg/kg (lead). The results of the confirmation sampling and subsequent risk evaluation indicate that no further threat to human health, the environment, or groundwater is anticipated at this site and no further investigation or remediation was recommended (MACTEC, 2006). The EPA concurred the 2006 IA Confirmation Report on May 25, 2006 (EPA, 2006).

Cleanup Levels

The TCCs for the SRCs were:

- Lead - 240 mg/kg
- Antimony - 27 mg/kg
- Arsenic - 2.87 mg/kg
- PAHs - indeno(1,2,3-cd)pyrene (0.15 mg/kg), benzo(b)fluoranthene (0.15 mg/kg), benzo(a)pyrene (0.015 mg/kg), and benzo(a)anthracene (0.15 mg/kg)

The TCCs for HA-80 and HA-85 were:

- Antimony - 27 mg/kg
- Copper - 2,500 mg/kg
- Lead - 240 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 39A. There are no additional actions found to be necessary for the soil at Site 39A.

Document References

- Harding Lawson Associates (HLA), 1997a. *Draft Final Site Characterization Site 39A – East Garrison Ranges, Fort Ord, California*. May 16. AR# BW-1735
- HLA, 1997b. *Approval Memorandum: Addendum to Fort Ord Site 39A Interim Action Approval Memorandum*. November 20. AR# IAFS-198
- HLA, 1998. *Interim Action Confirmation Report, Site 39A – East Garrison Ranges, Former Fort Ord, California*. October 18. AR# IAFS-219

- MACTEC Engineering and Consulting, Inc. (MACTEC), 2006. *Interim Action Confirmation Report, IA Area 39A HA-80 and HA-85*. March 7. AR# IAFS-232
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1997. *Approval Memorandum Proposed Interim Action Excavation Site 39A - East Garrison Ranges, Fort Ord, California*. January 10. AR# IAFS-134A
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- Army, 2005. *Approval Memorandum Proposed Interim Action Excavation 39A HA-80 and HA-85, Site 39A, East Garrison Ranges HA-80 and HA-85, Fort Ord, California*. April 6. AR# IAFS-228
- U.S. Environmental Protection Agency (EPA), 1997. *EPA Response to Approval Memorandum and Comments on Draft Site Characterization*. February 10. AR# IAFS-150
- EPA, 2002. *EPA Response to Confirmation Report*. February 5. AR# IAFS-219E
- EPA, 2005. *EPA Response to Approval Memorandum Site 39A HA-80 and HA-85*. June 7. AR# IAFS-228A
- EPA, 2006. *EPA Response to Confirmation Report Site 39A HA-80 and HA-85*. May 25. AR# IAFS-232D

Site 39B – Inter-Garrison Training Area

Site Background

Site 39B is located east of the Main Garrison, south of Inter-Garrison Road, between Eighth Avenue and Abrams Drive. In 1994 when a UXO removal team found a small container while conducting a subsurface removal action, two team members became dizzy and nauseated. The UXO team also noted metal debris and odors at a second location within 50 feet of the containers. An emergency response action was initiated to treat the team members and secure the site. Other items found in the vicinity of the incident included oil filters, scrap metal, paint cans, engines, and ammunition canisters. A TCRA was completed in 1994, and soil was determined to be contaminated with lead, oil, grease, and diesel fuel (Army, 2002). The parcel associated with Site 39B that is included in the partial deletion is S1.3.2.

Remedial Investigation and Feasibility Study

A TCRA was conducted in 1994 to locate and remove additional buried containers (Army, 1994a and 1994b). As described in the IA Approval Memorandum (Army, 1996a), soil samples were collected from each excavation. TPH, TRPH, 1,4-dichlorobenzene, and benzo(a)anthracene were detected above their respective PRGs in the soil samples collected after the completion of excavation. Arsenic was detected above its PRG, but below its background level. Based on these results, additional characterization was performed to evaluate the vertical extent of contamination and found site-related contamination was not identified at or below 5 feet bgs at the site. TPH, TRPH, 1,4-dichlorobenzene, and benzo(a)anthracene were identified to be SRCs (Army, 1996a).

In a SRE, maximum detected chemical concentrations were compared to PRGs and maximum or threshold background concentrations to identify potentially site-related chemicals and to assess the need for further action at the site based on the protection of human health and the environment (Army, 1996a). Results of the SRE indicated further action might be warranted to address potential health risks associated with exposure to SRCs and potential impacts to

groundwater associated with detected concentrations of 4-methylphenol in soil. Based on the lack of complete exposure pathways, the potential impacts to ecological receptors is unlikely (HLA, 1997).

Response Actions

The Army submitted an Approval Memorandum on February 20, 1996 for plug-in of Site 39B with the IAROD and proposed excavation. A total of approximately 165 cy of soil to a depth of 5 feet was estimated to be excavated (Army, 1996a). The EPA concurred with the proposed action at Site 39B (Army, 1996b).

A total of 164 cy of soil was excavated from two locations at the site. Based on confirmation sampling, the excavated soil was used in the OU2 Landfills for the foundation layer in the engineered cover system, and the excavations were backfilled with clean material. Results of confirmation sampling after excavation indicated left-in-place levels below all TCC values (HLA, 1997).

Based on the confirmation report and additional information (Army, 1997), the EPA concurred with the IA Confirmation Report for Site 39B on January 13, 1998 (EPA, 1998).

HA-161 of IA Area 39B was identified during site investigation activities conducted under the former Fort Ord BRA program. HA-161 was used for many years as a troop training area and trash pits, ammunition pits, and burn pits were found throughout the site. Soil sampling was performed in December 2004 and elevated lead concentration was detected at one location. Additional step-out sampling was conducted to further refine the area of elevated lead concentrations in October 2006. Results for step-out samples were below the Fort Ord specific background concentrations. The SRE indicated that lead is present in soil at unacceptable levels for human health at HA-161 in one sample location. Therefore, additional IA excavation actions were proposed for HA-161 at Site 39B in the Approval Memorandum on March 18, 2009 (Army, 2009) due to metals contamination at the location. The EPA concurred with the proposed action on April 14, 2009 (EPA, 2009).

Additional document review was performed by USACE in 2020 to identify the burn pits referenced in the site description of HA-161 of IA Area 39B in the site confirmation report (Army, 2009). No additional substantial documentation describing burn pits at the site was found. As such, the noted burn pits at HA-161 of IA Area 39B have been determined inconsequential for additional investigation, including for PFAS contamination.

The excavation area is located in the eastern portion of HA-161. 20 cy of contaminated soil was excavated at HA-161 and results showed confirmation samples collected after the excavation were below the TCCs. The excavated soil was disposed of at the OU2 Landfills and the site re-graded (Shaw, 2011). The results of confirmation sampling indicated remaining levels of contaminants below TCC levels. The results of the confirmation sampling and subsequent risk evaluation indicate that no further threat to human health, the environment, or groundwater is anticipated at this site and no further investigation or remediation is recommended (Shaw, 2011).

The EPA concurred with the 2011 IA Confirmation Report on January 6, 2011 (EPA, 2011).

Cleanup Levels

The TCCs for Site 39B were:

- TPH - 500 mg/kg
- 1,4-Dichlorobenzene - 7.4 mg/kg

- benzo(a)anthracene - 0.15 mg/kg
- 4-Methylphenol - 8.5 mg/kg

The TCCs for HA-161 were:

- Lead - 240 mg/kg
- Copper - 2,500 mg/kg
- Antimony - 27 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 39B. There are no additional actions found to be necessary for the soil at Site 39B.

Document References

- Harding Lawson Associates (HLA), 1997. *Interim Action Confirmation Report, Site 39B – Inter-Garrison Site, Fort Ord, California*. April 2. IAFS-170
- Shaw Environmental Inc. (Shaw), 2011. *Draft Final Interim Action Site 39B HA-161 Excavation, Inter Garrison Training Area, Fort Ord, California*. March 24. AR# IAFS-236A
- Shaw, 2011. *Draft Final Interim Action Confirmation Report Area 39B, Historical Area 161 Excavation Inter Garrison Training Area, Former Fort Ord, California*. March 24. AR# IAFS-236A
- U.S. Department of the Army (Army), 1994a. *Interim Action Record of Decision Contaminated Surface Soil Remediation, Fort Ord, California*. February 23. AR# IAFS-089
- Army, 1994b. *Action Memorandum Request for Time-Critical Removal Action at the Inter-Garrison Site, Fort Ord, California*. July 18. AR# BW-1811
- Army, 1994c. *Removal Action Report, Time Critical Removal Action at the Inter-Garrison Site, Fort Ord, California*. October 26. Included in AR# BW-0841
- Army, 1996a. *Approval Memorandum Proposed Interim Action Excavation Site 39B, Fort Ord, California*. February 20. AR# IAFS-183
- Army, 1996b. *Public Notice Announces the Interim Action of Excavation of Soil at Site 39B – Inter-Garrison Training Area*. April 9. AR# IAFS-191
- Army, 1997. *Response to EPA regarding Confirmation Report Site 39B*. November 19. AR# BW-1806A
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- Army, 2009. *Approval Memorandum Proposed Interim Action Excavation Site 39B HA-161 – Inter Garrison Training Area, Fort Ord, California*. March 18. AR# IAFS-233
- U.S. Environmental Protection Agency (EPA), 1994. *EPA Response to Action Memorandum for Inter-Garrison Site*. July 25. AR# BW-1598
- EPA, 1998. *EPA Response to Confirmation Report Site 39B*. January 13. AR# IAFS-170E
- EPA, 2009. *EPA Response to Approval Memorandum Site 39B HA-161*. April 14. AR# IAFS-233D

- EPA, 2011. *EPA Response to Draft Interim Action Site 39B HA-161 Confirmation Report*. January 6. AR# IAFS-236.3

Site 40 – Fritzsche Army Airfield Helicopter Defueling Area

Site Background and History

Site 40 was located in the northwestern portion of FAAF and consisted of four areas in the vicinity of Buildings 533 and 535 where helicopter parking, defueling, and routine maintenance operations were performed (HLA, 1996). Four areas of concern were identified and investigated at Site 40:

- Area A was east of Building 533 and consisted of unpaved dune sand with several petroleum-stained surface soil areas. Information obtained from employees working at Site 40 indicated that waste oil was dumped on these dune sands.
- Area B was north of Building 533 and was paved. A review of historical aerial photographs from before paving began in 1985 indicated potential dark surface soil staining and helicopter/vehicle storage at Area B.
- Area C was northwest of Building 533 and was partially asphalt-paved and partially unpaved. Information obtained from employees working at Site 40 indicated that the southern portion of Area C may have been used as a disposal area.
- Area D was west of Building 535 and unpaved. According to information provided by former employees, the western part of Area D was the location where solvents were poured out onto surface soils. The eastern portion of Area D consisted of stained surface soil and stained exterior wall surfaces associated with an exterior building faucet.

The parcels associated with Site 40 that are included in the partial deletion are L5.1.2, L5.1.3, L5.1.4, and L5.1.5.

Remedial Investigation and Feasibility Study

Site characterization activities included:

- Reviewing aerial photographs and interviewing personnel in the area to identify potential areas of concern.
- Evaluating soil gas, soil, and groundwater in suspected or confirmed areas of stained surface soil, former helicopter defueling, and potential unauthorized disposal for the presence of petroleum hydrocarbons and priority pollutant metals.
- Sampling and analyzing soil vapor samples at the areas of concern beneath paved and unpaved surfaces near Building 533; performing a geophysical survey at the potential disposal area; collecting and analyzing soil samples from borings and trenches excavated into stained surface soil, potential disposal materials, and at elevated soil gas concentrations; collecting and analyzing in situ HydroPunch groundwater samples; and installing and sampling one groundwater monitoring well.
- Evaluating detected chemical concentrations with respect to local background concentrations and risks to human health and the environment.

The analytical program included a soil gas survey; a geophysical survey; soil sampling from pilot borings, soil borings, and trenches; installation and sampling of a groundwater monitoring well; and sample analysis (HLA, 1996).

An SRE was conducted based on the site characterization data (HLA, 1996). The results of the SRE indicated further action was needed to address potential health risks associated with exposure to lead at Site 40. The maximum site-related concentrations for the other SRCs were

less than their respective PRGs, indicating that the health risks of possible exposure to these chemicals are acceptably low (HLA, 1996).

No significant impacts to groundwater are expected based on the results of quantitative modeling of possible migration of the organic chemicals detected at Site 40. Additionally, the results of a qualitative analysis indicate that the inorganic chemicals evaluated at Site 40 are not expected to migrate to groundwater if left in place at maximum detected site concentrations (HLA, 1996).

The results of a biological resources survey conducted at Site 40 indicate six plant communities are associated with the site: central coastal scrub, coast live oak woodland, central maritime chaparral, landscaped, upland ruderal, and valley needlegrass grassland. Potential ecological receptors were identified at the site and a quantitative ERA was conducted. Toluene and zinc were the only COCs identified at the site. Both chemicals were detected in paved areas where no complete exposure pathway is identified. No further work was recommended at this site based on the ERA (HLA, 1996).

Based on the results of the site characterization, no additional investigation was recommended in Area B or D. Shallow soil within portions of Areas A and C were recommended for excavation under the IAROD based on maximum detected TPH concentrations and lead concentrations above PRGs.

Monitoring Well MW-40-01-A is recommended for continued monitoring under the Basewide Groundwater Monitoring Program to verify that the TPH detections adjacent to the well were artifacts caused by naturally occurring organics collected with the HydroPunch samples and are not indicative of organic contamination in the groundwater (HLA, 1996).

In 2020, the *Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California*, was developed in response to requests from EPA and DTSC for additional information regarding the potential presence of PFAS compounds at former Fort Ord. An additional area of Site 40 has been identified and recommended for additional soil investigation for PFAS contamination. This additional location, PFAS 40A (within Parcel L5.1), is the location of a stormwater drainage pipe discharge for a reported discharge of AFFF at a previously unidentified helicopter defueling area east of the fire and rescue station and separate from the helicopter defueling areas previously identified as Site 40. Additional soil investigation is recommended at the location (Ahtna, 2020). As this location is not co-located with any previously identified areas of Site 40, Site 40 and associated parcels are included in the partial deletion. The location of PFAS 40A is within parcel L5.1, which remains on the NPL.

Response Actions

The two IRP excavation areas were designated 40A (within Parcel L5.1.5, which is a deletion parcel) and 40C. The Army submitted an Approval Memorandum on December 6, 1995 (Army, 1995). The EPA concurred with the proposed action on December 15, 1995 (EPA, 1995). Based on elevated concentrations of lead and TPH, 980 cy of soil were excavated from Areas A and C, with 650 cy transported to the FOSTA for treatment and the remainder disposed at the OU2 Landfills (ECC, 1997). Results of the confirmation sampling indicate soil with concentrations of TPH mixtures above the TCC of 500 mg/kg and soil with concentrations of lead above the TCC of 240 mg/kg were removed. The results of the confirmation sampling and subsequent risk evaluation indicate no further threat to human health, the environment, or groundwater is anticipated at this site. No further investigation or remediation was recommended (HLA, 1997).

The EPA concurred with the IA Confirmation Report for Site 40 on January 31, 1997 (EPA, 1997).

Monitoring well MW-40-01-A was included as part of the Basewide Groundwater Monitoring Program and was last sampled in September 2002 with no detection of carbon tetrachloride and TCE. In the *Annual Report of Quarterly Monitoring, October 2002 through September 2003, Former Fort Ord, California*, MW-40-01-A was removed from the sampling program and is only used for collecting groundwater elevation data (MACTECT, 2004).

Cleanup Levels

The TCCs for Site 40 were:

- Lead - 240 mg/kg
- TPH - 500 mg/kg

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Site 40.

Determination that the Criteria for Deletion have been Met

The implemented remedy achieves the degree of cleanup or protection specified in the IAROD for the deletion parcel and no further Superfund response is needed to protect human health and the environment.

Document References

- Ahtna Environmental, Inc. (Ahtna), 2020. *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California*. February 27. AR# OU2-722A
- Environmental Chemical Corporation (ECC), 1997. *Draft Closure Report, Site 40 – FAAF Defueling Area, Fort Ord Interim Action Sites – Phase II, Fort Ord, California*. January 14. AR# IAFS-155
- Harding Lawson Associates (HLA), 1996. *Draft Final Site Characterization, Site 40 – Fritzsche Army Airfield Defueling Area, Fort Ord, California*. January 9. AR# BW-1354
- HLA, 1997. *Interim Action Confirmation Report, Site 40 – Fritzsche Army Airfield Defueling Area, Fort Ord, California*. January 2. AR# IAFS-132
- MACTEC, 2004. *Draft Annual Report of Quarterly Monitoring October 2002 through September 2003, Former Fort Ord, California*. March 2. AR# BW-2277
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1995. *Approval Memorandum, Proposed Interim Action Excavation, IA Areas 40A and 40C, Site 40 – Fritzsche Army Airfield Defueling Area, Fort Ord, California*. December 6. AR# IAFS-180
- U.S. Environmental Protection Agency (EPA), 1995. *EPA Response to EPA Response to Site 40 – Fritzsche Army Airfield Defueling Area, Proposed Interim Action Excavation at Areas 40A and 40C, Approval Memorandum*. December 15. AR# IAFS-156
- EPA, 1997. *Remedial Action Completion, Operable Unit 3, Site 40, Fritzsche Army Airfield, Fort Ord, California*. January 31. AR# BW-1646

Site 41 – Crescent Bluff Fire Drill Area

Site Background

Site 41 consisted of four small firefighting training pits located on a bluff approximately 0.75 miles southeast of the East Garrison. The training pits became overgrown and contained water during the rainy season. Potential contaminants are flammable liquids (Army, 2002). The burn pits are suspected to have been used in the 1940s and 1950s for handheld fire extinguisher training (Ahtna, 2020).

The parcels associated with Site 41 that are included in the partial deletion are E11b.7.1.1 and E11b.7.1.2.

Remedial Investigation and Feasibility Study

Eight soil borings were drilled and sampled, and two surface soil samples were collected to investigate the subsurface in areas of potential contaminations at Site 41. Only arsenic and beryllium concentrations exceeded the established PRGs as well as their respective background threshold values. There was no established PRG for total chromium. Organic chemical compounds detected at Sites 41 included octachlorodibenzo-p-dioxin (OCDD), pentachlorophenol, and toluene, but their concentrations were below their respective PRGs. Based on the SRE, TPH are not expected to migrate from soil to groundwater beneath Site 41 (HLA, 1996).

Results of the SRE indicated that additional action at the site might be necessary to address potential health risk associated with exposure to arsenic and beryllium at Site 41. The highest observed concentrations of arsenic and beryllium are generally found in the surface and near-surface samples (0 to 1.0 foot deep). Concentrations of total chromium above background levels were observed, but the observed concentrations of total chromium were below trivalent chromium PRG. Groundwater modeling results indicate that no significant impacts to groundwater are expected from the SRCs in soil at Site 41. The ERA indicated that adverse impacts to fauna or flora are unlikely. Results indicated that the burn pits at Site 41 would be excavated under the IAROD program. Limited excavation of approximately 1 foot of soil from the burn pits with the elevated concentrations of arsenic and beryllium were recommended (HLA, 1996).

In 2020, the *Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California*, was developed in response to requests from EPA and DTSC for additional information regarding the potential presence of PFAS compounds at former Fort Ord. Review of Site 41 identified no potential PFAS contamination. Because the four shallow depressions (1 to 3 feet deep) that were suspected burn pits used for firefighting drills were relatively small, it is suspected they were used for handheld fire extinguisher training. Additionally, they are suspected of having been used in the 1940s and 1950s and not used for training after 1971. AFFF was not used at Army installations before 1973 and therefore there is no suspected source of PFAS contamination. For these reasons, there is no suspected release of AFFF at the Crescent Bluff FDA (Ahtna, 2020). As there is no recommendation for further PFAS investigation, the site is included in the partial deletion.

Response Actions

An estimated total volume of 65 cy of soil was to be excavated at IA Area 41A. Excavation would occur at three of the four burn pits to a depth of 1 foot. The Army submitted an Approval Memorandum on February 8, 1996 for plug-in of Site 41 with the IAROD and proposed

excavation. The maximum detected background concentrations of 5.1 mg/kg will be used as a TCC for arsenic. No TCC was developed for beryllium because detected concentrations of beryllium at Site 41 appear to be naturally occurring (Army, 1996). The EPA concurred with the proposed action at the site on July 1, 1996 (EPA, 1996).

Excavations were performed between June 26 and 27, 1996 and each excavation encompassed a burn pit, for a total of 76 cy of soil. Each burn pit was excavated to a depth of 1 foot. Results of the confirmation sampling indicated that concentrations of arsenic above the TCC of 5.1 mg/kg was removed. Based on the results of the composite sample collected from the stockpile, the excavated soil was used in the foundation layer for the engineered cover system at the OU2 Landfills. The excavations were not backfilled (HLA, 1997).

Results of confirmation sampling after excavation indicated left in place levels below all TCC values. The results of the confirmation sampling and subsequent risk evaluation indicate that no further threat to human health, the environment, or groundwater is anticipated at this site and no further investigation or remediation was recommended (HLA, 1997).

The EPA concurred with the Interim Action Confirmation Report on April 14, 1997 (EPA, 1997).

Cleanup Levels

The TCC for the site was:

- Arsenic - 5.1 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for Site 41. There are no additional actions found to be necessary for the soil at Site 41.

Document References

- Ahtna Environmental, Inc. (Ahtna), 2020. *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California*. February 27. AR# OU2-722A
- Harding Lawson Associates (HLA), 1996. *Draft Final Site Characterization Site 41 – Crescent Bluff Fire Drill Area, Fort Ord, California*. March 22. AR# BW-1356
- HLA, 1997. *Interim Action Confirmation Report, Site 41 – Crescent Bluff Fire Drill Area, Fort Ord, California*. February 4. AR# IAFS-149
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1996. *Approval Memorandum Proposed Interim Action Excavation, Site 41 – Crescent Bluff Fire Drill Area, Fort Ord, California*. February 8. AR# IAFS-179
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1996. *EPA Response to Approval Memorandum Site 41*. July 1. AR# BW-1455
- EPA, 1997. *EPA Response to Confirmation Report Site 41*. April 14. AR# IAFS-163

OF-15 – Outfall 15

Site Background

The outfall included a storm drain and channel immediately west of Trainfire Range No. 11 on the Beach Trainfire Ranges (Site 3) (Army, 2002). The parcels associated with Outfall 15 that are included in the partial deletion are S3.1.1 and S3.1.2.

Remedial Investigation and Feasibility Study

This outfall was investigated and characterized as part of the Basewide Surface Water Outfall Investigation (BWSWOI; HLA, 1995). Soil samples were collected as part of the investigation and found concentrations of unknown hydrocarbons from the TPH diesel analysis at 2,200 mg/kg at 2 to 2.5 foot bgs 20 feet downgradient of the outfall. Unknown hydrocarbons were detected in four near-surface soil samples at concentrations that ranged from 10 to 54 mg/kg and were not detected above reporting limits in the deep soil samples around the buried channel perimeter. At the buried channel adjacent to the outfall and 20 feet downgradient from the outfall, concentrations of arsenic, lead, and dieldrin were also detected above the PRG (Army, 1996).

The SRE indicated that additional action at OF-15 was necessary to address potential health risks associated with SRCs. Groundwater modeling indicated that no significant impacts to groundwater are expected. The ecological screening assessment indicated no concern for fauna (Army, 1996).

Unknown TPH, arsenic, lead, and dieldrin were identified as SRCs. On the basis of these data, it was proposed that the soil above the buried channel at OF-15 be excavated under the IAROD (Army, 1996).

Response Actions

The IA would address soil contaminated with arsenic, lead, dieldrin, and unknown TPH at the outfall and channel. The total estimated volume of excavated material to be removed from OF-15 was 150 cy, based on excavating all of the soil material from above the buried concrete channel. The Army submitted an Approval Memorandum on October 29, 1996 for plug-in of OF-15 with the IAROD and proposed excavation (Army, 1996). The EPA concurred with the proposed action in February 1997 (Army, 1997).

A total volume of 430 cy of soil was excavated from the site and stockpiled onsite. On the basis of the composite soil samples collected from the stockpiles, the excavated soil was transported to the former Fort Ord landfill for use in in the foundation layer for the engineered cover system at the OU2 Landfills. The excavation was backfilled with clean material (HLA, 1998).

The left-in-place maximum concentrations following excavation were 21 mg/kg (unknown TPH), 2.2 mg/kg (arsenic), 59.6 mg/kg (lead), and 0.001 mg/kg (dieldrin). The results of the confirmation sampling and subsequent risk evaluation indicate that no further threat to human health, the environment, or groundwater is anticipated at this site and no further investigation or remediation is recommended (HLA, 1998).

The EPA concurred with the IA Confirmation Report on March 16, 2005 (EPA, 2005).

Cleanup Levels

The TCCs for the site were:

- Unknown TPH - 500 mg/kg

- Arsenic - 2.87 mg/kg
- Lead - 240 mg/kg
- dieldrin - 0.011 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for OF-15. There are no additional actions found to be necessary for the soil at OF-15.

Document References

- Harding Lawson Associates (HLA), 1995. *Volume I - Draft Final Basewide Surface Water Outfall Investigation, Remedial Investigation/Feasibility Study, Fort Ord, California*. May 17. AR# BW-1146
- HLA, 1998. *Interim Action Confirmation Report, Outfall 15, Fort Ord, California*. September 3. IAFS-213
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1996. *Approval Memorandum Proposed Interim Action Excavation, OF-15, Fort Ord, California*. October 29. AR# IAFS-125
- Army, 1997. *Public Notice: Army announces regulatory agency concurrence on the Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, California, Site 1 and Stormwater Outfalls OF-15, OF-34 and OF-35*. February 27. AR# IAFS-172
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 2005. *EPA Response to Confirmation Report OF-15*. March 16. AR# IAFS-213E.1

OF-34/35 – Outfall 34 and Outfall 35

Site Background

Outfalls OF-34 and OF-35 discharged into a vegetated drainage channel west of Building 533 at the western end of FAAF. Interviews with former base employees and research indicated chemicals used in Building 533 and/or other buildings at FAAF may have entered storm drain inlets upstream of OF-34 and OF-35 (Army, 2002). The parcels associated with Outfall 34 and Outfall 35 that are included in the partial deletion are L5.1 and L5.1.4.

Remedial Investigation and Feasibility Study

These outfalls were investigated and characterized as part of the BWSWOI (HLA, 1995). The BWSWOI assessed environmental conditions at surface water outfalls or concentrated surface water discharge locations across Fort Ord. Soil samples were collected at depths of 0 to 0.5 feet bgs and at 5 to 5.5 feet bgs from soil boring immediately adjacent to and 20 feet downgradient from each outfall. At OF-34, two PCBs (arochlor-1254 and arochlor-1260) were detected at concentrations above PRG in the 5 to 5.5-foot bgs soil sample location adjacent to the outfall. Lead and cadmium were detected at concentrations above PRGs in the 0 to 0.5-foot bgs

adjacent to the outfall. Unknown petroleum hydrocarbon in the diesel range was also detected at 780 mg/kg in the same near-surface sample (Army, 1996).

The SRE for both OF-34 and OF-35 indicated that additional action at both OF-34 and OF-35 might be necessary to address potential health risks associated with exposure to aroclor-1254 and aroclor-1260 at OF-34 and lead and cadmium at OF-35. Groundwater modeling indicated that no significant impacts to groundwater were expected from the chemicals detected at the locations. The ecological screening assessment indicated no further action (NFA) relating to ecological impacts was required at Outfalls 34 and 35. Based on the results, soils in both areas met the criteria for early soil excavation established as part of the IAROD process at Fort Ord. These areas were proposed for excavation under the IAROD program (Army, 1996).

Response Actions

The Army submitted an Approval Memorandum on August 22, 1996 for plug-in of OF-34 and OF-35 with the IAROD. An estimated total volume of 37 cy was proposed to be excavated from OF-34 to a depth of 10 feet immediately downgradient of the outfall. A total estimated volume of 20 cy was proposed to be excavated from OF-35 to a depth of 5.5 feet immediately downgradient of the outfall (Army, 1996). The EPA concurred with the proposed action in February 1997 (Army, 1997).

The total volume excavated at OF-34 was 37 cy to a depth of 10 feet and stockpiled onsite. Results of confirmation samples indicate that aroclor-1254 and aroclor-1260 were below the detection limit. Based on one composite sample collected from the stockpiled soil, the excavated soil was used in the foundation layer of the engineered cover system at the OU2 Landfills and the excavation was backfilled with clean fill material. The total volume of excavated soil at OF-35 was 20 cy to a depth of 5.5 feet and stockpiled onsite. Results of confirmation samples are well below the TCCs established for cadmium, lead, PAHs, and extractable TPH. Based on one composite sample collected from the stockpiled soil, the excavated soil was used in the foundation layer of the engineered cover system at the OU2 Landfills and the excavation was backfilled with clean fill material (HLA, 1997).

The left-in-place maximum concentrations following excavation were ND (aroclor-1254) and ND (aroclor-1260) for OF-34; ND (unknown TPH), 0.22 mg/kg (cadmium), and 2.3 mg/kg (lead) for OF-35. The results of the confirmation sampling and subsequent risk evaluation indicate that no further threat to human health, the environment, or groundwater is anticipated at this site and no further investigation or remediation is recommended (HLA, 1997).

The EPA concurred with the IA Confirmation Report on July 23, 1997 (EPA, 1997).

Cleanup Levels

The TCCs for OF-34 were:

- aroclor-1254 - 0.02 mg/kg
- aroclor-1260 - 0.02 mg/kg

The TCCs for OF-35 were:

- Unknown TPH - 500 mg/kg
- Cadmium - 8.1 mg/kg
- Lead - 240 mg/kg

Operations and Maintenance

There are no LUCs or O&M requirements for this site.

Statement of Action Complete

All RAOs as defined in the IAROD have been met and all response actions have been completed for OF-34 and OF-35. There are no additional actions found to be necessary for the soil at OF-34 and OF-35.

Document References

- Harding Lawson Associates (HLA), 1995. *Volume I - Draft Final Basewide Surface Water Outfall Investigation, Remedial Investigation/Feasibility Study, Fort Ord, California*. May 17. AR# BW-1146
- HLA, 1997. *Interim Action Confirmation Report Outfalls 34 and 35 – Fritzsche Army Airfield, Fort Ord, California*. June 20. AR# IAFS-176
- U.S. Department of the Army (Army), 1994. *Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, Monterey, California*. March 15. AR# IAFS-089
- Army, 1996. *Approval Memorandum Proposed Interim Action Excavation OF-34 and OF-35, Fritzsche Army Airfield, Fort Ord, California*. August 6. AR# IAFS-126
- Army, 1997. *Public Notice: Army announces regulatory agency concurrence on the Interim Action Record of Decision, Contaminated Surface Soil Remediation, Fort Ord, California, Site 1 and Stormwater Outfalls OF-15, OF-34 and OF-35*. February 27. AR# IAFS-172
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G
- U.S. Environmental Protection Agency (EPA), 1997. *EPA Response to Confirmation Report OF 34/35*. July 23. AR# BW-1804

No Action Sites

The No Action Plug-In ROD (Army, 1995a) was developed to specify the process for identifying a No Action site at Fort Ord and follow an Approval Memorandum process to “plug-in” to the No Action ROD. A No Action site is a site where remedial action is not necessary to protect human health and the environment. No Action sites at Fort Ord fall under two categories:

- Category 1 sites are those that are already in a protective state and pose no current or potential threat to human health or the environment. Category 1 sites include areas where storage and/or release or disposal of hazardous substances has occurred and some level of contamination may be present; however, the level of contamination that exists at a site is below the levels required for protection of human health and the environment.
- Category 2 sites are those sites where CERCLA does not provide the appropriate authority to take any remedial action except to the extent that the FFA provides for corrective action under RCRA. Category 2 sites include two types: sites that had storage and/or release of contaminants that are excluded from the CERCLA process (e.g. UST program); and sites where no release to the environment occurred (e.g., asbestos in buildings).

In addition, No Action sites will be evaluated for potential impact to groundwater. Preliminary assessments for ecological risk indicated that the majority of the anticipated No Action sites do not pose ecological risks because the areas were already disturbed (paved).

To “plug-in” a site to the No Action ROD, an Approval Memorandum will be prepared to demonstrate how each area meets the appropriate requirements and conditions for either a Category 1 or 2 site. Each Approval Memorandum will be made available to the public including local and county agencies. After a public review period the Approval Memorandum will be submitted for regulatory agency review and approval.

Selected Remedy and Decision Documents

Based on the No Action Plug-In ROD (Army, 1995a), a No Action site is a site where remedial action is not necessary to protect human health and the environment. No action is warranted under the following general sets of circumstances applicable to sites at Fort Ord:

- Where the baseline risk assessment or screening risk evaluation concluded that conditions at the site poses no unacceptable risks to human health and the environment.
- Where a release involved only substances exempt from remedial action under CERCLA Section 101 (investigation and/or remediation may be undertaken pursuant to other state or federal authority).
- Where a previous response action (e.g., interim remedial action or removal action) eliminated existing and potential risks to human health and the environment such that no further action is necessary.

Although the No Action sites at Fort Ord do not require treatment or controls, groundwater monitoring may be performed as part of basewide monitoring activities.

Response Actions

Generally, any chemicals present in soil at No Action sites are the result of former routine maintenance and support activities on Fort Ord. Such activities include maintenance of military vehicles at wash racks, tank storage of chemicals such as waste oil, the use of oil/water separators in drainage areas, and pesticide use and storage.

There are 18 total sites at Fort Ord that have gone through the No Action ROD “plug-in” and approval process.

IRP Site	No Action Category	Approval Memorandum Date	EPA Concurrence Date
Site 11	1	October 17, 1997	See note below
Site 13	1	May 22, 1995	August 2, 1995
Site 18	1	October 13, 1995	See note below
Site 19	1	October 10, 1995	See note below
Site 23	1	October 17, 1997	See note below
Site 26	1	August 10, 1995	September 25, 1995
Site 27	1	May 22, 1995	August 2, 1999
Site 28	1	August 10, 1995	September 25, 1995
Site 29	1	August 10, 1995	September 25, 1995
Site 35	1	May 22, 1995	August 2, 1995
Site 37	1	May 22, 1995	August 2, 1995
Site 38	1	January 26, 1996	July 11, 1996
HA-79	1	May 13, 2009	July 23, 2009
HA-92	1	May 13, 2009	July 23, 2009
HA-98	1	May 13, 2009	July 23, 2009
HA-100	1	May 13, 2009	July 23, 2009
HA-121	1	May 13, 2009	July 23, 2009
HA-183	1	May 13, 2003	July 23, 2009

Note: The 1st Five Year Review (Army, 2002) indicated the site has completed the approval process.

Additional information on the approved No Action sites is provided below under “No Action Sites Remedial Investigation.” Reference documents are listed after the site summaries.

Cleanup Levels

There are no cleanup levels for No Action sites.

Operations and Maintenance

There are no operations and maintenance requirements for No Action sites.

Statement of Action Complete

The above listed No Action sites have completed the No Action Approval Process as defined in the No Action Plug-In ROD (Army, 1995a).

No Action Sites Remedial Investigation

Additional information on the approved No Action sites is provided below.

Site 11 – AAFES Fueling Station

Site 11 is the former Army and Air Force Exchange Service (AAFES) Fueling Station at Building 4220, which is located within the Main Garrison. The site consisted of a garage for automotive

engine work, a small store for auto supplies and sundries, and an active gas station that included six gasoline USTs, one waste oil UST, and one oil/water separator (Army, 2002).

Data from the previous investigation conducted in February 1990 were reviewed and an oil/water separator inspection was conducted in May 1993. Lead, total fuel hydrocarbons (TFH), and high boiling point hydrocarbons (TFH-H) were considered to be site-related chemicals. However, based on the results of the SRE the potential health risks of exposure to site-related chemicals are acceptably low. Results of groundwater modeling indicate that impacts from the maximum detected concentrations of chemicals in soils are not expected to migrate to groundwater. On the basis of the findings of the SRE and the quantitative and qualitative assessment of potential groundwater impacts, no further action for chemicals identified in soil was recommended at Site 11 (HLA, 1996).

Site 11 was included in the No Action Plug-in ROD (Army, 1995a) as a Category 1 site based on the findings under the RI/FS program (Army, 1997b). All additional work relating to the USTs have been completed as required under regulations governing underground storage tanks (Army, 2002).

The parcel associated with Site 11 that is included in the partial deletion is F2.3.

Site 13 – Railroad Right-of-Way

Site 13 was a 5,000-foot long railroad spur and right-of-way adjacent to an industrial area in the Main Garrison. The site was bounded by Third Street, Eleventh Street, Highway 1, and First Avenue. The railroad tracks head north (immediately east and paralleling Highway 1) then curves eastward into the industrial area (Army, 2002).

No documents indicating spills along the railroad right-of-way were found during a literature review, however, there was a potential for surface soil contamination from chemical spillage along the railroad right-of-way during transportation and unloading at the docks. Site characterization activities consisted of conducting a soil gas survey at two locations adjacent to Building T-2053 and drilling 29 soil borings along the right-of-way. Nine priority pollutant metals, total extractable unknown petroleum hydrocarbons, acetone, 4,4-DDT, 2-methylnaphthalene, and acenaphthene were considered to be SRCs. Based on the results of the SRE, the health risks from possible exposure to SRCs were acceptably low. Exposures by ecological receptors to SRCs are also expected to be negligible. The evaluation also indicated that no groundwater impacts are expected from the SRCs at Site 13 (HLA, 1994). Based on the investigations completed, no further action at Site 13 was recommended (Army, 1995b).

Site 13 was included in the No Action Plug-in ROD as a Category 1 site based on the findings under the RI/FS program (Army, 1995b).

The parcel associated with Site 13 that is included in the partial deletion is L20.16.2.

Site 18 – 1600 Block Facility

Site 18, the 1600 Block Facility in the Main Garrison was a multi-purpose complex that included maintenance and support facilities for motor pool vehicles, the DOL Busworks Yard, and several light industrial buildings. Potential areas of concern were USTs (waste oil, diesel, and gasoline), wash racks, oil/water separators, grease racks, drum storage areas at the DOL Busworks Yard and the Training and Audiovisual Service Center (TASC) Plastics Shop, and a dry well at the TASC Graphics Shop. Approximately 99 percent of the site was covered with either asphalt or concrete (Army, 2002).

Site characterization activities included the drilling and sampling of eight soil borings and sampling of three existing onsite monitoring wells – MW-18-01-180, -02-180, and -03-180. Based on the site-specific soil data, the SRE indicated the potential risks to human health and the environment are acceptably low (HLA, 1995c).

TCE was detected in all three groundwater sampling rounds in 1992, at concentrations ranging from 4.3 to 7 µg/L from one monitoring well – MW-18-03-180 (Army, 1995j). It is suspected that the TCE detected in the groundwater samples is the result of the migration of TCE in groundwater from the OU2 Landfills and would be remediated as part of the OU2 groundwater plume (HLA, 1995c). MW-18-03-180 was last sampled in September 2011 with TCE concentration below the aquifer cleanup level and was inaccessible in September 2012 due to obstruction. All three monitoring wells onsite were destroyed in June 2014 (HGL, 2014).

There were 10 SWMUs at Site 18: eight SWMU cages, two buildings where hazardous wastes were generated (the TASC Plastics and Graphics shops), and one former SWMU site that was vacant at the time of SWMU investigation. Based on the investigation, no further action was recommended for all 10 locations (Harding ESE, 2002).

Site 18 has been included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995j).

The parcels associated with Site 18 that are included in the partial deletion are E2b.1.5, L21, and S1.5.1.1.

Site 19 – 2200 Block Facility

Site 19, the 2200 Block Facility in the Main Garrison, is 90 percent paved and consisted of storage, administration, and light industrial buildings. Three potential areas of concern were Buildings T-2241, T-2251, and T-2253. Building T-2241 (the photographic laboratory, formerly the telephone and telegraph building) consisted of an area where wastes were reportedly discharged through a flood drain into a suspected dry well beneath the building. Building T-2251 consisted of an area where an oily substance reportedly flowed to a drain east of the building during wet weather. Building T-2253 (former gasoline service station) consisted of an area where one soil sample collected during tank removal activities in 1991 contained TPH constituents (Army, 2002).

Site characterization activities consisted of drilling two soil borings and collecting soil samples for chemical analysis, including one sample from beneath the concrete electrical vault. Chlordane was detected at concentrations of 3 mg/kg from the soil sample collected beneath the vault in Building T-2241. Based on the results of the initial investigation, additional soil sampling was conducted to evaluate the vertical extent of pesticides and VOCs in the soil for the vault beneath Building T-2241. Sand in the bottom of the concrete vault was sampled to evaluate proper disposal methods and was then removed and placed in drums for subsequent disposal. Chlordane was detected at 0.16 mg/kg in the soil sample collected from 1 foot beneath the vault floor and at 7.2 mg/kg in soil sample collected from the sand on the vault floor in the subsequent investigation. Although chlordane was detected at a concentration slightly above the PRG at 1 foot beneath the vault floor, the extent of contamination appeared to be limited to the soil in and immediately beneath the vault floor. Exposure by human or ecological receptor to contaminated soil is considered very unlikely. Additional evaluation also found that no complete migration pathway exists, and groundwater was unlikely to be affected by concentrations of chlordane. From an ecological risk assessment perspective, no further action was required (HLA, 1995d). Since the sand in the vault was removed and properly disposed of during the

1994 investigation and based on the results of this investigation, no further action was recommended at Site 19 (Army, 1995i).

SWMUs located at Site 19 (buildings 2252 and 2253) had been removed from investigation in the SWMU report. Building 2252 was determined to be a pottery kiln, not an incinerator, and building 2253 was demolished during a UST removal (Army, 1997a).

Site 19 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995i).

The parcel associated with Site 19 that is included in the partial deletion is E2b.1.5.

Site 23 – 3700 Block Motor Pool Complex

Site 23, the 3700 Block Motor Pool Complex, was an approximately 19-acre parcel in the eastern portion of the Main Garrison where vehicle maintenance activities were performed. Potential areas of concern included USTs, former grease racks, oil/sand interceptors with oil/sand separators, and hazardous waste storage sheds (Army, 2002).

Seven soil borings were drilled, and twenty-one soil samples collected for chemical analyses during the initial investigation. Two additional borings were drilled, and six soil samples were collected during the supplemental investigation at the former wooden grease rack. Three rounds of groundwater samples were also collected from three existing monitoring wells for a total of nine samples. None of the eight metals detected in the soil samples exceeded their respective PRGs or background threshold. Total chromium concentrations detected in samples were considered to represent background conditions. Total oil and grease were detected at concentrations up to 140 mg/kg in soil. Six metals were detected in the groundwater samples, but no California or federal groundwater standards were exceeded. TPH were not detected in any of the groundwater samples. The SRE performed for Site 23 indicated that health risks from possible exposure to site-related chemicals in soil are acceptably low. Based on the SRE, TPH was not expected to migrate from the soil to the groundwater beneath the site (HLA, 1997). No potentially complete exposure pathways were identified for species associated with ecological assessment endpoints (Army, 1997c).

Based on the results of the investigation, no further action at Site 23 was recommended. Site 23 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1997c).

The parcels associated with Site 23 that are included in the partial deletion are S1.1.2 and S1.4.

Site 26 – Sewage Pump Stations, Buildings 5871 and 6143

The Imjin sewage pump station was in Building 5871, and the Clark sewage pump station was in Building 6143. Both buildings were southwest of the Fritzsche Army Airfield. There were eight documented sewage spills from these stations between 1988 and 1991; however, soil contamination from the sewage spills is not expected (Army, 2002 and HLA, 1991).

Overflows were reported at both pump stations; however, since these stations only serve residential housing areas, it is unlikely that industrial or CERCLA regulated contaminants are present. Soil contamination was not suspected. Since sewage overflows are typically washed down to the nearest storm drain and the area disinfected, soil contamination from sewage was not suspected. There was no field investigation or health risk evaluation completed due to the nature of the site. Based on the history of the site, site-related chemicals, impacts to groundwater, and ecological risks were not expected at Site 26 (Army, 1995f).

Site 26 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995f).

The parcels associated with Site 26 that are included in the partial deletion are E4.3.2.1 and S1.2.1.

Site 27 – Army Reserve Motor Pool

Site 27, the Army Reserve Motor Pool, is located immediately south of the former Fritzsche Army Airfield (FAAF). At the time of the 1994 investigation, potential areas of concern were a wash rack and the associated oil/water separator, a 500-gallon waste oil UST, and a hazardous materials storage area (Army, 2002). The site included one SWMU: a hazardous waste storage area for the Reserve Center Motor Pool. It was a RCRA generator-only storage area, and no evidence of leaks was observed during a 1996 investigation. The waste oil UST had been removed in July 1995. No further investigation was recommended (Harding ESE, 2002). The U.S. Army Reserve Center remains an active facility.

Site characterization consisted of drilling one soil boring near the oil/water separator inlet to collect subsurface soil samples for chemical analysis. PCE and carbon tetrachloride were each reported in one sample at concentrations below the laboratory reporting limits. Arsenic was detected above its PRG value but was below its background threshold value. Chromium, which has no PRG, was detected at concentrations below the background threshold value. Results of the SRE indicated that health risks from possible exposure to site-related chemicals in soil were acceptably low. No significant impact to groundwater quality was expected from the organic chemicals detected in soil at Site 27. Inorganic chemicals were not expected to migrate to groundwater if left in place at maximum detected site concentrations. The basewide ERA indicated that exposure by ecological receptors to chemicals at Site 27 is negligible (HLA, 1994d).

Based on the results of the investigation, no further action at Site 27 was recommended. Site 27 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995c).

The parcel associated with Site 27 that is included in the partial deletion is F4.

Site 28 – Barracks and Main Garrison Area

Site 28 consisted of four buildings and surrounding areas in the Main Garrison Area: the Visual Information Center (Building T-2842), the Photo Development Unit (Building T-2850); the Print Shop (Building T-2353); and Building T-2000 (a former laundromat). Potential COCs associated with Site 28 include solvents, PCE, and chemicals used for photograph development (Army, 1995g).

Soil gas samples were collected from twenty locations around the Visual Information Center and the Print Shop, and three soil borings were drilled to a depth of approximately 21.5 feet around each of the two buildings. Three surface soil samples were collected in the crawl space beneath the Photo Developing Unit, where pipes originating in the building terminated under the building and are open-ended. A field inspection was conducted of the potential dry well near Building T-2000. Results of soil gas samples near the Visual Information Center and the Print Shop indicated the presence of organic compounds, but their presence was not confirmed during analyses of soil samples. All metals detected beneath the Photo Developing Unit were below their respective PRGs with the exception of total chromium – which has no PRG and was detected below the basewide background concentration. Results of the Remedial Investigation and the SRE indicated that there was an acceptably low risk to human health at the site. The

basewide ERA indicated that exposure by ecological receptors to chemicals at Site 28 was expected to be negligible (HLA, 1995b). No significant groundwater impacts were expected from the concentrations of the six site-related chemicals detected at Site 28 (Army, 1995g).

Site 28 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995g).

The parcels associated with Site 28 that are included in the partial deletion are E2b.1.1.1, E2b.2.1, E2b.3.1.1, and S4.1.1.

Site 29 – Defense Reutilization and Marketing Office (DRMO)

Site 29, the DRMO, was located in the East Garrison and was centered around Buildings 110 and 111, where PCB-containing transformers may have been stored, and an unpaved field adjacent to the DRMO was a hazardous materials storage area. Potential contaminants were PCB-containing waste oil, metals, and PCBs (Army, 2002).

Site characterization consisted of drilling soil borings to collect soil samples for chemical analysis. Ten inorganic compounds were detected at the site. The selected compounds were below the associated PRG values except for arsenic, which was detected above PRG but below the background threshold value. Detectable concentrations of oil and grease and unknown TPHd were reported in several near-surface samples in the open field and from borings located near Buildings 110 and 111. Oil and grease detections appeared to be associated with degraded asphalt, either remnants of a former asphalt road or crushed asphalt that was placed at the site. The maximum concentrations of unknown TPHd (280mg/kg) was below the TPH PRG value of 500 mg/kg. Results of the investigation and the SRE indicated an acceptably low risk to human health. The basewide ERA indicated exposure by ecological receptors to chemicals at Site 29 was expected to be below levels of concern. No significant impact to groundwater quality was expected from the TPH as diesel detected at Site 29 (HLA, 1994c).

The main DRMO hazardous materials storage area was subsequently closed under RCRA (HLA, 2000).

Based on the results of the investigation, no further action at Site 29 was recommended. Site 29 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995h).

The parcel associated with Site 29 that is included in the partial deletion is L23.3.2.1.

Site 35 – FAAF Aircraft Cannibalization Yard

Site 35, the FAAF Aircraft Cannibalization Yard, was an approximately 11-acre undeveloped area across which aircraft debris has been scattered, west of the northern portion of the FAAF. The FAAF FDA is approximately 800 feet north of the site and located hydraulically downgradient, eliminating groundwater concerns from the FAAF FDA at Site 35. Debris consisted of helicopter and small plane fuselages, jet engines, and wing sections. Potential contaminants associated with the site are engine oils and fuels that many have leaked from the aircraft parts, and possibly solvents from aircraft cannibalization activities (Army, 2002).

A soil gas survey was conducted at and north of the site (i.e., in the direction towards the FAAF FDA). The soil gas survey was conducted to screen the shallow soil for the presence of VOCs in unsaturated soil, and to select boring locations. Soil gas samples were collected and analyzed for total hydrocarbons and other selected VOCs. Following the completion of soil gas survey, three soil borings were drilled to an approximate depth of 20 feet bgs. Soil samples were collected and analyzed for TPH as gasoline and diesel, VOCs, priority pollutant metals, and pH.

No VOC concentrations were reported above the laboratory reporting limits. Mercury was detected above its background value, but below its PRG. Beryllium was detected above its PRG, but below its background value. Results of the investigation and the SRE indicated an acceptably low risk to human health. The basewide ERA indicated that exposure by ecological receptors to chemicals at Site 35 was expected to be below levels of concern (HLA, 1995a).

Based on the results of the investigation, no further action at Site 35 was recommended. Site 35 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995d).

As the site was used as an aircraft cannibalization yard with no further association of activities that occurred at the FAAF FDA other than the proximity in location, there is no documentation to support suspected use of PFAS containing compounds, including AFFF, at the site. There are no PFAS concerns at the site.

The parcel associated with Site 35 that is included in the partial deletion is S2.1.3.

Site 37 – Trailer Park Maintenance Shop

Site 37, the Trailer Park Maintenance Shop, was near the northwest portion of Fort Ord and served as the maintenance storage yard for the adjacent trailer park. Potential areas of concern were the waste oil drum storage area, degraded and stained asphalt at a former location of an aboveground tank, and the storm drain inlet that collected runoff from the site (Army, 2002).

Site characterization activities consisted of drilling soil borings at these locations to collect soil samples for chemical analysis. Arsenic was detected at concentrations above its PRG, but below its background threshold value. Total chromium, for which there is no PRG, was detected below the background threshold value. Both the oil and grease and the TPH concentrations were below the TPH PRG of 500 mg/kg. Results of the investigation and the SRE indicated acceptably low risk to human health and the basewide ERA indicated that exposure by ecological receptors to chemicals at Site 37 was expected to be negligible (HLA, 1994a).

On the basis of investigations completed and summarized above, no further action at Site 37 was recommended. Site 37 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1995e).

The parcel associated with Site 37 that is included in the partial deletion is L27.

Site 38 – AAFES Dry Cleaners

Site 38 was an AAFES dry cleaning facility in the Main Garrison. The site consisted of three USTs. Initial site characterization activities included the removal of Tank 3, which had not been used for at least 2 years, and the collection of a soil sample from beneath the bottom of the tank for chemical analysis. No detection of TPH as diesel, VOCs, BTEX, or TPHg were reported in the soil sample. Tanks 1 and 2 were removed in August 1994. Soil samples were collected from the walls and floor of the excavation pit and from the excavated stockpiled soil. Analysis of samples from the excavation pit did not detect any of the analyzed chemicals. Soil samples from excavation stockpile only detected TPH as diesel at a maximum concentration of 44 mg/kg (HLA, 1995f).

Based on the chemical data collected at Site 38, no adverse health effects were expected to be associated with this site. Since the contaminated soil had been removed, no potential pathway to groundwater for organic compounds existed. Impacts to ecological receptors were also likely to be negligible. On the basis of investigations completed, no further action at Site 38 was

recommended. Site 38 was included in the No Action Plug-in ROD as a Category 1 site based on findings under the RI/FS program (Army, 1996).

The parcel associated with Site 38 that is included in the partial deletion is S1.5.1.1.

HA-79 – 22 Caliber Small Arms Range

HA-79, a 22 Caliber Small Arms Firing Range, is located within the East Garrison and was identified on the 1940 Camp Ord Training map. This historical area is contained within Site 39A. Site reconnaissance was conducted in May 2001 at which time no spent small arms ammunition or targets were mapped, however due to dense vegetation it was difficult to map the ground surface. Site characterization sampling was recommended for antimony, copper, and lead in soil based on site historic use. Sampling was conducted in August 2001 at four locations and December 2002 at five locations based on results of the 2001 sampling. Maximum detected concentrations for lead was 130 mg/kg, for copper was 13 mg/kg, and for antimony 2 mg/kg. Based on the collected analytical results, lead concentrations were below the Interim Action ROD PRG of 240 mg/kg and that the health risks from possible exposure to the site related components of the site-related chemicals evaluated at HA-79 were acceptably low (Army, 2009a).

Based on the chemical data collected at HA-79, no adverse health effects are expected to be associated with this site. Based on the chemical results and the depth to groundwater at HA-79, impacts to groundwater at the site are not expected. No additional action is required to address ecological receptors. On the basis of investigations completed, no further action at HA-79 was recommended. HA-79 was included in the No Action Plug-in ROD as a category 1 site based on findings under the RI/FS program (Army, 2009a).

Based on the collected analytical data, the site was re-evaluated in the *Revised Technical Memorandum, Evaluation for Lead Contamination at Selected Sites, Former Fort Ord, California* for protectiveness of lead impacted sites. HA-79 was included in the evaluation of Site 39A. The concentrations for in-place soils at Site 39A were less than 223 mg/kg and the 95% concentration was calculated to be 77.9 mg/kg. As such, the site was confirmed protective of human health and the environment (KEMORN, 2019).

The parcel associated with HA-97 that is included in the partial deletion is L23.3.3.1.

HA-92 – Old Demolition Training Area

HA-92 is located in Parker Flats and was used as a land mine, anti-armor course, and demolition area. Munitions removal was conducted in October 1998. Site reconnaissance in August 2001 identified two sets of blank small arms ammunition casings and an old ammunition burn pit. Soil samples were collected at 10 locations in June 2002 and analyzed for lead, copper, antimony, TPH, SVOCs, and explosives. Based on sampling results, copper, di-n-butylphthalate, TPHd, and TPHmo were identified as site related chemicals. Analysis of the site related chemicals indicates that the health risks from possible exposure at HA-92 is acceptably low (Army, 2009b).

There is no suspected use of AFFF and subsequent PFAS concerns at this site. AFFF is intended for use on petroleum-based fires. As the description of the burn pits at HA-92 suggest non-petroleum items were disposed of in the pits there is no reason to suspect use of AFFF.

Based on the chemical data collected at HA-92, no adverse health effects are expected to be associated with this site. Based on the chemical results and the depth to groundwater at the site, impacts to groundwater at the site are not expected. No additional action is required to address ecological receptors. On the basis of investigations completed, no further action at HA-92 was recommended. HA-92 was included in the No Action Plug-in ROD as a category 1 site based on findings under the RI/FS program (Army, 2009b).

The parcel associated with HA-92 that is included in the partial deletion is E19a.4.

HA-98 – Leary Hill Region

HA-98 is located within the eastern part of the former Fort Ord, and was used for various training activities throughout Fort Ord's history. Training Site 9, an overnight bivouac area used in the 1970s and 1980s, is located within HA-98. Munitions removal was conducted in 1997. Site reconnaissance in August 2001 identified several areas of concern, and recommended sampling to evaluate the presence of chemical residue in areas where military munitions were identified or where 55 gallon drums were located. Soil samples were collected at ten locations in June 2002 and analyzed for TPH, perchlorate, explosives, and SVOCs. TPHd, TPHg, and TPHmo were the only analytes detected at the site. Evaluation of detected chemicals indicates possible exposure to site related chemicals is acceptably low (Army, 2009c).

Based on the chemical data collected at HA-98, no adverse health effects are expected to be associated with this site. Based on the chemical results and the depth to groundwater at the site, impacts to groundwater at the site are not expected. No additional action is required to address ecological receptors. On the basis of investigations completed, no further action at HA-98 was recommended. HA-98 was included in the No Action Plug-in ROD as a category 1 site based on findings under the RI/FS program (Army, 2009c).

The parcel associated with HA-98 is F1.3 which remains on the NPL due to the status of munitions response.

HA-100 – Demolition Training Area

HA-100 is located south of the main East Garrison Area and was used as a live grenade training range. Munitions removal was conducted in 1998-1999. Site investigation was recommended at HA-100 to investigate the possibility of explosive residue related to site historical use as a live grenade training area. Soil samples were collected at 13 locations in July 2002 and five more locations in December 2004 based on 2002 chemical results. Perchlorate and trinitrotoluene (TNT) were detected at low concentrations, maximum of 106 µg/kg for perchlorate and 500 µg/kg for TNT. Analysis of the site related chemicals indicated that health risks from possible exposure at HA-100 are acceptably low (Army, 2009d).

Based on the chemical data collected at HA-100, no adverse health effects are expected to be associated with this site. Based on the chemical results and the depth to groundwater at the site, impacts to groundwater at the site are not expected. No additional action is required to address ecological receptors. On the basis of investigations completed, no further action at HA-100 was recommended. HA-100 was included in the No Action Plug-in ROD as a category 1 site based on findings under the RI/FS program (Army, 2009d).

The parcel associated with HA-100 that is included in the partial deletion is E11b.7.1.1.

HA-121 – Rifle Grenade Range

HA-121 is located in the eastern portion of the former Fort Ord and was used as a rifle grenade range. Military munitions investigation was conducted in 1996. Site reconnaissance conducted in August 2001 identified various areas of concern. Sampling was recommended to evaluate areas where smoke producing items were used during training, and to identify whether chemicals associated with identified 55 drums were present in soil. Soil samples were collected at nine locations and analyzed for VOCs, SVOCs, explosives, perchlorate, and TPH. TPHd, TPHg, TPHmo, and VOCs were detected at the site. Analysis of the site related chemicals indicated that health risks from possible exposure at HA-121 are acceptably low (Army, 2009e).

Based on the chemical data collected at HA-121, no adverse health effects are expected to be associated with this site. Based on the chemical results and the depth to groundwater at the site, impacts to groundwater at the site are not expected. No additional action is required to address ecological receptors. On the basis of investigations completed, no further action at HA-121 was recommended. HA-121 was included in the No Action Plug-in ROD as a category 1 site based on findings under the RI/FS program (Army, 2009e).

The parcel associated with HA-121 is F1.3 which remains on the NPL due to the status of munitions response.

HA-183 – Shoulder Launched Projectile Area

HA-183 is located within Parker Flats and was used as a rifle grenade and shoulder-launched projectile firing range. Munitions removal was conducted in October 1998. Site reconnaissance in August 2001 identified two sets of blank small arms ammunition castings, an empty 55 gallon drum, and several old ammunition burn pits. This range was used from the 1940s through the 1960s (IT, 2002). As AFFF was not used at Army installations before 1973, there are no PFAS concerns at this site. Soil samples were collected at fourteen locations in July 2002. All samples were analyzed for perchlorate and explosives. Samples collected near the 55 gallon drum were analyzed for TPH and SVOCs. Analytes were selected based on the site's historical use. TPHd and TPHmo were the only detections, at maximum concentrations of 1.8 mg/kg and 14 mg/kg respectively. Evaluation of site related chemicals indicates that health risks from possible exposure at HA-183 are acceptably low (Army, 2009f).

Based on the chemical data collected at HA-183, no adverse health effects are expected to be associated with this site. Based on the chemical results and the depth to groundwater at the site, impacts to groundwater at the site are not expected. No additional action is required to address ecological receptors. On the basis of investigations completed, no further action at HA-183 was recommended. HA-183 was included in the No Action Plug-in ROD as a category 1 site based on findings under the RI/FA program (Army, 2009f).

The parcel associated with HA-183 that is included in the partial deletion is E19.a.5.

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Remedial Investigation Sites

The RI Sites ROD (Army, 1997) addresses the following sites investigated under the Basewide RI/FS Program at Fort Ord: RI Sites 2 and 12, 16 and 17, 31, and 39; surface water outfalls OF-1 through -14, OF-16 through -30, OF-32 and -33 (Site 4); and two additional sites, Sites 25 and 33.

Site 2 Main Garrison Sewage Treatment Plant and Site 12 Four Sub-Areas

Site Background and History

Site 2 comprises an area of approximately 28 acres that included the infrastructure associated with the Main Garrison Sewage Treatment Plant (MGSTP), which was the primary sewage treatment facility for Fort Ord. This facility served the majority of the housing areas and the main industrial areas from the late 1930s until it was decommissioned in May 1990. The former treatment facility was fenced and contained several buildings and two large trickling filters. Three unlined sewage ponding areas and ten asphalt-lined sludge-drying beds were located outside of the fenced area. During operation, effluent from the MGSTP was discharged in accordance with a National Pollutant Discharge Elimination System permit to a storm drain that emptied to the west onto Indian Head Beach during low tide and discharged to Monterey Bay during high tide. Sewage from the former Fort Ord area now flows via gravity to a pumping station in Marina and is then pumped to the Monterey Regional Treatment Plant in Marina. Potential contaminants associated with the former MGSTP included metals, pesticides, and hydrocarbons.

Site 12 includes four former operations areas south and east of Imjin Parkway and State Route 1 in an area now mostly occupied by commercial retail complexes. The four major areas include the Lower Meadow Disposal Area, the Directorate of Logistics (DOL) Automotive Yard, the Cannibalization Yard, and the railroad spur, as described below. Only the SRU, not including those parcels associated with the on-going soil-gas rebound study, is included in the partial deletion at this time. The parcels associated with Site 2 and Site 12 that are included in the partial deletion are S3.1.1 and S3.1.2.

Lower Meadow Disposal Area. The Lower Meadow was an approximately 2-acre grassy field east of State Route 1, near the former Twelfth Street gate. The Lower Meadow was approximately 5 feet lower than the adjacent DOL Automotive Yard and received runoff from the surrounding area. Several drainpipes and outfalls were present in the eastern and southeastern portions of the site, but it is unknown whether these were designed as drainage lines. No buildings were present in the Lower Meadow. The Lower Meadow previously was used to dispose of waste material generated by the DOL, such as scrap metal, oil, and batteries, and also was reported to contain road construction waste. Contaminated soil and associated debris were excavated during cleanup activities at the site, and the area was backfilled with clean soil (Army, 2017).

DOL Automotive Yard. The DOL Automotive Yard is east of State Route 1 and northeast of the railroad spur that ran east from First Avenue. The 8.5-acre fenced site was adjacent to Twelfth Street to the north and the Lower Meadow to the west. The site included a paint shop, two wash racks, one temporary hazardous waste container storage area, an oil/water separator, an aboveground storage tank (AST), and several buildings that housed automotive repair operations. The site was paved and sloped gently to the west. Documented site activities included transmission repair, degreasing, testing, vehicle steam cleaning and washing of

engines, and petroleum/oil/lubricant storage. A buried container, which originally was used as a muffler for exhaust from engine testing, also may have been used for liquid waste storage. Tanks and contaminated soils were excavated during cleanup activities at the site, and the area was backfilled with clean soil.

Cannibalization Yard and Industrial Area. The Cannibalization Yard was a small (0.5-acre) paved and fenced area located within the larger (18.5 acres) paved and fenced Industrial Area. The entire 18.5-acre area was bounded by State Route 1 to the west, a baseball field to the east, and Tenth Street to the south. The railroad spur separated the Industrial Area from the DOL Automotive Yard to the north. The area included a machine shop, a furniture repair shop, a laundry facility, a temporary hazardous waste container storage area, an oil/water separator, and an AST used for storing waste oil. Beginning in 1964, the Cannibalization Yard was used for disassembling old equipment, primarily decommissioned military vehicles. Used motor oil was collected and stored on site in 55-gallon drums, and also in the 450-gallon AST for a brief period (between January 1988 and August 1988). Other vehicle maintenance activities included removal and storage of the following types of fluids and parts: gasoline (leaded and unleaded), diesel fuel, brake fluid, asbestos-containing brake shoes and linings, antifreeze/coolants, lead and acid from batteries, lubricating greases, and transmission fluids. Prior to the installation of the oil/water separator at the northeastern corner of the yard, runoff from the site flowed down the sloped area northeast of the Cannibalization Yard toward the baseball field. Contaminated soils were excavated during cleanup activities at the site, and the area was backfilled with clean soil.

Remedial Investigation and Feasibility Study

The scope of the RI at Sites 2 and 12 (Sites 2/12) included two phases. The Site 2 MGSTP Phase 1 investigation included characterization of soil, soil gas, and groundwater. The Site 12 Phase 1 investigation included characterization of soil, soil gas, and groundwater, geophysical surveys and trenching in the Lower Meadow to characterize the extent of landfill materials, and sampling liquid in the underground muffler at the DOL Automotive Yard.

The purpose of the Phase 2 investigation was to further characterize Sites 2/12 through the investigation of data gaps identified during the Phase 1 investigation. The investigation of Sites 2/12 were combined in Phase 2, and three types of investigations were performed:

- The hydrogeology investigation included additional groundwater monitoring, seismic reflection profiling, tidal influence monitoring, and aquifer testing.
- The source characterization included additional characterization of soil, soil gas, and groundwater, and excavation and removal of the buried muffler in the DOL Automotive Yard.
- The groundwater contamination investigation included additional characterization of groundwater.

Additionally, soil and groundwater samples were collected from Sites 2/12 under three basewide investigations (Basewide Hydrogeologic Characterization, Baseline Ecological Risk Assessment, and Basewide Surface Water Outfall Investigation).

The results of the RI indicated there were no significant continuing source areas at the MGSTP, Lower Meadow, DOL Automotive Yard, Cannibalization Yard and Industrial Area, and the railroad spur.

The FS recommended the following remedies for soil and groundwater:

- Soil excavation and land farming.

- Groundwater extraction, treatment, and injection.

Selected Remedy

The initial proposed reuse plan for Site 2 included outdoor and indoor aquaculture facilities for raising fish and shellfish, with additional research facilities to support oceanographic studies, and an open space area. Reuse planned for Site 12 included a central business district, light industrial areas, a high-tech business park, a transit center, retail businesses, medium to high-density residential areas, and a school.

To meet the proposed reuse plan, the following RAOs were identified in the Remedial Investigation/Feasibility Study (RI/FS) for Sites 2/12 and are still appropriate for the current planned use:

- No unacceptable human health risks were associated with direct exposure to soil; however, an RAO for protection of groundwater was established to remediate TPH in soil to a concentration of 500 milligrams per kilogram (mg/kg) or less.
- Reduce or eliminate human health risks associated with potential exposure to groundwater.
- Removal of TPH-contaminated soil and construction debris at Site 12.

To meet the RAOs, the selected and documented remedy for Sites 2/12 in the RI Sites ROD (Army, 1997) included the following components:

- Groundwater extraction and treatment by GAC.
- Disposal of treated groundwater by reuse aboveground or injection or infiltration of treated water back into the aquifer.
- Deed restriction on groundwater use.
- Excavation of approximately 16,000 cy of soil containing TPH concentrations above the cleanup goal of 500 mg/kg from the Lower Meadow Disposal Area, and placement at the OU2 Landfills.
- Excavation of approximately 3,800 cy of soil containing TPH concentrations above the cleanup goal of 500 mg/kg from the Outfall Area and Cannibalization Yard, and placement at the OU2 Landfills.

In 2016, the RI Sites ROD was supplemented by the ESD No. 1 (Army, 2016) to add the SVETS designed to remediate soil gas containing COCs above Soil Gas Cleanup Levels (SG-CLs). The selected and documented remedy for soil gas at Sites 2/12 in the ESD includes the following components:

- SVE and treatment with GAC, and
- Soil gas monitoring during remediation.

Response Actions

The first stage of the excavation at the Lower Meadow was completed between March 3 and April 24, 1997. Approximately 37,000 cy of construction debris and TPH-impacted soils were removed and transported to the OU2 Landfills as general fill. After the removal of the construction debris, TPH-impacted soil appeared to be present in the northern wall of the excavation. To evaluate the lateral and vertical extent of TPH-impacted soil north of the excavation, a soil boring investigation was performed between May 19 and 22, 1997.

Evaluation and correlation of the results of the first soil boring investigation with visual observations within the excavation indicated the need for additional subsurface data to better

define the lateral and vertical extent of the TPH contamination. A second soil boring investigation was performed between July 28 and 31, 1997.

Lower Meadow excavation boundaries were expanded based on the results of the two soil boring investigations. After additional excavation was conducted, TPH-impacted soil and debris removal was again halted in the northern portion of the Lower Meadow excavation area in November 1997 because of uncertainty about the extent of TPH-affected soil visible in the excavation walls and encountered in borings north of the excavation. TPH-affected soil appeared to be present in the northern walls of the excavation in a nearly horizontal zone, apparently continuous around the north face of the excavation between approximately 15 and 25 feet bgs. A third soil investigation was conducted, the excavation boundaries were expanded, and excavation was resumed in June 1998. Excavation at the Cannibalization Yard was conducted in two small areas, the northern and southern excavations, corresponding to the SRUs identified in the RI Sites ROD (Army, 1997).

The excavation boundaries generally coincided with the planned limits, except in the northern excavation where the excavation was extended further to the north. The excavation was backfilled after confirmation sample analytical results showed there were no TPH concentrations exceeding the soil cleanup level.

Approximately 67,100 cy of soil and debris were excavated during the soil remediation at Sites 2/12. Approximately 58,400 cy were designated potentially impacted by debris or TPH, based on either visual observation or sample analytical results, and were placed in the OU2 Landfills as general fill. This volume included 200 cy from the Cannibalization Yard. The remaining 8,700 cy of excavated soil was not impacted by debris or TPH and was stockpiled on site and later used to backfill the Lower Meadow excavation (IT, 1999).

Construction of the Sites 2/12 soil gas remedy is documented in the SVETS O&M Manual (Ahtna, 2015). Soil vapor extraction and treatment first occurred at Sites 2/12 on May 9, 2014 as part of a pilot study performed with five SVE wells over 38 days (AES, 2015). Continuous full-scale SVE and treatment began on September 14, 2015 (Ahtna, 2017).

The Sites 2/12 SVETS is a component of the groundwater remedy and currently consists of the soil vapor treatment unit (SVTU) and ten SVE wells located at Site 12. Five SVE wells were installed in 2014 as the original SVE pilot study network. Five additional SVE wells were installed in 2015 as part of the full-scale soil gas remedial system and are located to the north of the original SVE pilot study network.

System operations consist of vadose zone soil gas extraction from SVE wells at Site 12. Extracted soil gas is piped to the 2/12 SVTU where COCs are removed by adsorption to vapor-phase GAC and treated soil gas is vented to the atmosphere. The 2/12 SVTU consists of system controls, a positive displacement blower (vacuum pump), and two 3,000-pound vapor-phase GAC vessels operated in series.

The SVETS is operating until COC concentrations in soil gas have met the Soil Gas QAPP criteria. A soil gas rebound study will be conducted to confirm if COC concentrations are stabilizing or declining once the SVETS ceases operation. This portion of the soil remedial unit remains on the NPL. The parcels associated with the SVETS remedy and the future soil-gas rebound study are E2b.2.1, E2b.2.2, E2b.2.5, and L12.3. While parcels S3.1.1 and S3.1.2 associated with Site 2 (the beach parcels) were included in the Sites 2/12 remedial action, there is no operating remedy within these parcels (Ahtna, 2019a). As there are no soil or soil gas concerns associated with these parcels, these parcels are included in the partial deletion. The groundwater remedy at this site is on-going; groundwater is not included in the partial deletion.

Cleanup Levels

The documented ROD cleanup level for TPH-contaminated soils at Site 2 and 12 is 500 mg/kg (Army, 1997). The remedial action completed for TPH-impacted soils at Sites 2/12 meets the RAOs established in the RI Sites ROD (Army, 1997) for removal of TPH-contaminated soil and debris. At the completion of excavation, achievement of the RAOs was demonstrated by meeting the following criteria:

- All final confirmation samples contained less than 500 mg/kg of TPH.
- Field personnel observed and documented the removal of debris and stained or odorous soil material from the excavation.

The COCs and SG-CLs selected for treatment of soil gas at Sites 2/12 are documented in the ESD No. 1 (Army, 2016) as follows:

- Tetrachloroethene (PCE): 1,800 µg/m³
- Trichloroethene (TCE): 1,000 µg/m³

The quarterly SGMP at Sites 2/12 began in the First Quarter 2015 after an RI/FS Addendum was conducted as presented in the *Final Remedial Investigation/Feasibility Study Addendum at Sites 2/12, Former Fort Ord, California* (RI/FS Addendum; AES, 2015). The SGMP includes collecting soil gas samples for chemical analysis from soil gas probes and SVE wells associated with Sites 2/12. The presence and concentration of soil gas COCs associated with Sites 2/12 are compared with each COC's SG-CL to determine their horizontal and vertical distribution in the vadose zone.

The remedial activities that have been completed to date have adequately addressed all exposure pathways that could result in unacceptable risks in these areas. There is no human health exposure to contaminated groundwater or soil gas at the site. Remedial actions for soil have been completed at the site. Remedial actions for soil-gas are on-going. Only those parcels not associated with the on-going soil gas remedy are included in the partial deletion.

Operations and Maintenance

Because the RAOs for removal of TPH-impacted soil at Sites 2/12 were achieved during the remedial action for soil, there are no remedial systems to operate or maintain for soil. SVETS operations are conducted and routine maintenance activities are performed following procedures in the SVETS O&M Manual (Ahtna, 2015).

As specified in the RI Sites ROD (Army, 1997), the remedy includes institutional controls (i.e., deed restrictions) to prevent the use of groundwater within the contaminant plume for domestic or agricultural purposes. There are no institutional controls required or implemented for soil and soil gas.

Determination that the Criteria for Deletion have been Met

The implemented remedies for soil achieve the degree of cleanup or protection specified in the RI Sites ROD (Army, 1997) for the deletion parcels (S3.1.1 and S3.1.2), and no further Superfund response is needed to protect human health and the environment.

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Site 4 – Beach Stormwater Outfalls

Site Background and History

Most of the storm drainage system at the former Fort Ord was designed and built in the early 1940s, separate from the sanitary sewer system lines. As the base grew, the storm drainage system was expanded, but the major lines in the Main Garrison still ran from east to west. An extensive system of branches fed into the major lines and collected surface runoff from housing/recreational areas, motor pools, maintenance yards, and light industrial facilities (HLA, 1991). The main storm drain lines in the Main Garrison discharged storm runoff at two outfalls in the dune areas, one outfall on the beach, and four outfalls approximately 30 feet above the surf zone along the Monterey Bay (collectively Site 4; HLA, 1995a). Before the mid-1960s, no releases to the storm drains were treated prior to discharge at the outfalls. Later, oil/water separators were installed at motor pools and maintenance yards, some of which had wash racks discharging directly to the storm drainage system. If improperly operated, the oil/water separators could overflow and release hazardous materials to the storm drains. Additionally,

storm drain inlets were readily accessible and could have received unauthorized discharges of oil, fuel, and solvents (HLA, 1991).

The parcels associated with Site 4 that are included in the partial deletion are S3.1.1 and S3.1.2.

Remedial Investigation and Feasibility Study

The Basewide Surface Water Outfall Investigation was performed as part of the Basewide RI/FS to assess environmental conditions at surface water outfalls or locations of concentrated surface drainage across Fort Ord. Organic or inorganic compounds released onto the ground surface in areas of known historical chemical usage could be transported away from these areas via surface drainage features, such as storm drain inlets, concrete ditches, or natural channels. The purpose of the basewide investigation was to evaluate the discharges from the surface water drainage system (including the storm drain system) and characterize the impact of these discharges on the soils at the outfalls. The work completed for this investigation was performed in accordance with the final RI/FS Work Plan (HLA, 1991).

The Basewide Surface Water Outfall Investigation evaluated contamination within and adjacent to thirty-five outfalls and manholes, including the Site 4 stormwater outfalls. The scope of the RI at the outfalls included:

- Review of storm drain system and topographic maps.
- Interviews of base personnel to identify storm drain system components, assess their age and condition, and identify releases suspected to have entered the storm drain system.
- Identification of outfall locations and points of surface water collection.
- Soil and sediment sampling and analyses for TPH, VOCs, priority pollutant metals, pesticides, PCBs, PAHs, and total organic carbon (TOC).
- Soil gas sampling and analyses for total hydrocarbons and VOCs.
- A human health screening risk evaluation to evaluate possible impacts of chemicals detected in the outfall sediment and soil samples.

The results of the RI indicated:

- OF-15 was the only outfall among the surface water outfalls that required further characterization or evaluation. Based on the data from OF-15, impacted soil at OF-15 should be excavated under the Interim Action Record of Decision (IAROD; Army, 1994). (See OF-15 under the Interim Action section for more information.)
- OE-34 and OF-35 were identified after the first phase of the investigation was conducted. Based on the data from OF-34, further characterization of the soil contamination will be conducted under the IAROD. Based on the data from OF-35, soil excavation at the sampling location under the IAROD was recommended. (See OF-34/35 under the Interim Action section for more information.)
- All the remaining outfalls required no further action (NFA; HLA, 1995b).

The FS did not include Site 4 because the RI recommended excavation of soil under the IAROD (Army, 1994) for three of the outfalls, and identified no action for the other outfalls investigated as part of the RI.

Selected Remedy

The RI Sites ROD (Army, 1997) was finalized in 1997 and stated OF-15 and OF-34/35 would be remediated under the IAROD. Additionally, NFA is required for the other outfalls investigated as

part of the RI. Accordingly, there are no RAOs for Site 4 outfalls because the SREs indicated there are no unacceptable risks to human health and the environment associated with the presence of chemicals at these outfalls.

Response Actions

No response actions were required at surface water outfalls OF-1 through -14, OF-16 through -30, OF-32 and -33 (Site 4).

Cleanup Levels

No cleanup levels are necessary for the selected remedy.

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Site 4.

Determination that the Criteria for Deletion have been Met

The selected remedy achieves the degree of cleanup or protection specified in the RI Sites ROD for the deletion parcels and no further Superfund response is needed to protect human health and the environment.

Document References

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Sites 16 and 17

Site Background and History

Sites 16 and 17 are located in the Main Garrison area of the former Fort Ord. The sites lie directly south of Eighth Street, on either side of Fifth Avenue, and occupy a total area of 67 acres. Sites 16 and 17 and the immediate surrounding area were formerly used for vehicle and equipment maintenance. Before the present buildings were constructed, the sites were also used for disposal of debris and refuse.

Prior to remediation, Site 16 consisted of the following areas:

DOL Maintenance Yard. The DOL Maintenance Yard formerly consisted of six buildings and structures and a gravel and asphalt concrete yard enclosed within a fenced area. The DOL Maintenance Yard was developed in the 1950s for use as a heavy equipment maintenance

facility (Army, 1997). Activities at the yard included vehicle and weapons repair; weapons bluing; spray painting; steam cleaning; washing; and storage of paint, nonhazardous materials, and unused motor oil.

Pete's Pond Extension and Pete's Pond. These are low areas that fill with precipitation and runoff during rainy periods. Pete's Pond and Pete's Pond Extension existed prior to development of the area. A review of aerial photographs indicated that refuse was dumped into the depressions during the late 1940s or early 1950s (Army, 1997).

Prior to remediation, Site 17 consisted of three areas:

1400 Block Motor Pool Complex. This area, which includes Buildings 1476 through 1495, was constructed in about 1977. The facility was used to service motor vehicles, including light and heavy trucks and other Army vehicles. Various materials, including lubricating oils, brake fluid, coolants, cleaning solvents, diesel, and gasoline were stored in underground storage tanks (USTs). The USTs were removed as part of the UST program at Fort Ord, and all UST locations have been granted clean-closure status by the Monterey County Health Department.

Storage Buildings on Fourth Avenue. These buildings were built in the 1940s for storage of various materials. For example, corrosive chemicals were stored in Buildings 1431 and 1435. Building 1442 previously housed an incinerator for waste generated from the first Fort Ord Hospital, constructed in the 1940s.

Disposal Area. This area was used extensively to dispose of debris at Fort Ord; other than aerial photographs, there are no known sources of information on site history related to disposal.

The parcels associated with Sites 16 and 17 that are included in the partial deletion are L5.8.1, L5.8.2, L20.17.1, S1.5.1.1, and S1.5.1.2.

Remedial Investigation and Feasibility Study

The objectives of the RI at Sites 16 and 17 were to determine the source areas of potential contamination and to define the nature and extent of that contamination. A further objective was to collect sufficient data to carry out human health and ecological risk assessments and FS. The Basewide RI/FS (HLA, 1995) provides detailed information on the RI performed at Sites 16 and 17. The results of the RI are summarized in the RI Sites ROD (Army 1997) as follows:

DOL Maintenance Yard: Chemicals, including dioxins and light and heavy TPH, such as diesel (TPHd), were detected in near-surface soil samples.

Pete's Pond Extension: Incinerated debris and medical debris was landfilled in Pete's Pond Extension. Other detected debris included ordnance, glass bottles, metal, and one 55-gallon drum. Chemicals detected in soil samples included metals, organic compounds, TPH, and dioxins.

Pete's Pond: Debris was detected in several areas of Pete's Pond. Total oil and grease, pesticides, metals, and dioxins were detected in soil samples from Pete's Pond.

Site 17 Disposal Area: Incinerated and unincinerated debris was detected at the Site 17 Disposal Area. Unknown diesel-like chemicals and motor oil, metals, and dioxins were detected in soil samples from the Disposal Area.

Other Site 17 Areas: TPH as diesel, silver, and copper were each detected once in soil samples from other areas (Storage Buildings on Fourth Avenue and Disposal Area) at Site 17.

As part of the Sites 16/17 remedial investigation, groundwater samples were collected from three wells (MW-16-01-A, MW-17-01-A, and MW-17-02-180) in several rounds between March 30, 1992 and February 25, 1994. Sampling results indicated the following chemicals of concern at Sites 16/17: A-aquifer (PCE, TCE, and antimony) and Upper 180-foot aquifer (Carbon tetrachloride, PCE, and TCE). Based on soil and groundwater sampling at the site, there was no human health risk from soil contaminants, however the excavation of soil was recommended for protection of groundwater from detected levels of TPH in the soil. The groundwater contamination detected at Sites 16/17 was determined to be associated with the OU2 plume and is included in the OU2 remedy. As such, groundwater at Sites 16/17 was not considered an additional remedial unit (HLA, 1996). Groundwater media is not included in the partial deletion.

Selected Remedy

The RI Sites ROD (Army, 1997) presents the selected remedial action for soil at Sites 16 and 17. The selected remedy consists of excavation of TPH-contaminated soil and debris and disposal at the OU2 Landfills.

Based on the risk assessment presented in the Basewide RI/FS, the RI Sites ROD defines the following RAOs for Sites 16 and 17:

- No unacceptable human health risk associated with direct exposure to soil; however, the remedial action for protection of groundwater was to remediate TPH in soil to a concentration of 500 mg/kg or less (Army, 1997).
- Removal of debris because contamination in soil may be mixed with debris.

Response Actions

In October 1996, a pre-construction investigation was conducted for the areas at Site 16 that had been proposed for remediation in the RI Sites ROD (Army, 1997) and the *Remedial Action Work Plan, Remediation Sites, Fort Ord, California* (RAWP) (IT, 1997). The RAWP proposed excavation of ten separate areas at Site 16, and one at Site 17, that had been defined in three SRUs. Soil Remedial Unit 16-1 consisted of three small areas in the DOL Maintenance Yard, southwest of Building T-4900. Soil Remedial Unit SRU-2 consisted of one large area in Pete's Pond Extension (Site 16) and six areas in Pete's Pond. Soil Remedial Unit SRU-17 consisted of the Site 17 Disposal Area.

The purpose of the investigation was to confirm the locations of the Site 16 SRUs designated in the RI Sites ROD, to further delineate the limits of excavation required to remove buried debris and impacted soil exceeding cleanup levels, and to assist in forecasting remedial action excavation and backfill volumes. The investigation consisted of trenching to evaluate the presence of buried debris and to collect and analyze soil samples for TPH. The trenches were located in the SRUs and in other areas as directed by the Army (IT, 1999a).

The extent of remediation proposed in the Basewide RI/FS was refined based on the distribution of debris and TPH-impacted soil found during the investigation. Soil removal was initiated following delineation of the areas requiring remedial excavation (IT, 1999a):

Excavation of Site 16 was conducted from March 31 to June 26, 1997. Excavation of Site 17 was conducted from April 21 to October 14, 1997 (IT, 1999a). The remedial action at Sites 16 and 17 was conducted in 1997 and 1998 in accordance with the requirements of the RI Sites ROD (Army, 1997). Potential presence of munitions and explosives of concern (MEC) in this area was subsequently evaluated under the MMRP as a Track 1 site and no further action is required regarding munitions response.

Approximately 40,740 cy of soil were excavated during the remediation of Site 16. Approximately 27,770 cy were designated impacted by debris or TPH and were placed in the OU2 Landfills, Area E, as general fill. This volume consisted of 6,620 cy from the DOL Maintenance Yard, 230 cy from Pete's Pond, and 20,920 cy from Pete's Pond Extension. The remaining volume was not impacted by debris or TPH and was stockpiled on site and later used to backfill the excavations at both Site 16 and Site 17. Approximately 107,000 cy of soil and debris were excavated during the remediation of Site 17. All of this volume was considered to be impacted by debris or TPH and was used as general fill in Area E of the OU2 Landfills. Excavation continued until visible debris had been removed. Soil samples were then collected for analysis for TPH. When the concentrations of TPH were below the cleanup level, the excavation was stopped. Small amounts of debris observed adjacent to Building 1483 at Site 17 were not removed because of the building foundation (IT, 1999a).

Two rounds of excavation were required to achieve the RAOs at two locations at Site 16 because soil samples indicated the presence of TPH at levels above the cleanup level as follows:

- In the DOL Maintenance Yard, initial sampling indicated a TPH concentration >500 mg/kg in one sample (SS-113)
- In Pete's Pond, initial sampling indicated a TPH concentration >500 mg/kg in one sample (SS-059).

In both cases, over-excavation was performed at the sample locations by excavating 2-ft deep and halfway to the adjacent acceptable confirmation samples. Samples were then collected at the original sample location and on the sidewalls of the enlarged excavation. The final confirmation samples collected from each location demonstrated that the TPH concentration was less than the cleanup level. There were no TPH concentrations at Site 17 that exceeded the cleanup level, and no over-excavation was necessary. (IT, 1999a)

Inspections and confirmation sampling were conducted to demonstrate that RAOs were achieved through removal of TPH-contaminated soil and debris. Confirmation samples were collected to verify that soil materials left in place did not contain TPH in excess of the cleanup level of 500 mg/kg defined in the RI Sites ROD. First-round confirmation samples were collected from the sidewalls and bottoms of excavations after field personnel had observed the removal of debris or stained or odorous soil materials. Additional excavation was conducted in any areas found to contain TPH at a concentration equal to or greater than 500 mg/kg. This process necessitated the collection of second-round confirmation samples at two locations. (IT, 1999a)

After excavation was completed, achievement of the RAOs was demonstrated by meeting the following criteria:

- Field personnel observed and documented the removal of debris or stained or odorous soil materials from the excavation.
- All final confirmation samples contained less than 500 mg/kg of TPH.

Cleanup Levels

A TCC of 500 mg/kg or less was identified for TPH in soil at Sites 16 and 17 (Army, 1997).

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Sites 16 and 17.

Determination that the Criteria for Deletion have been Met

The Construction Close-Out Report for Sites 16 and 17 (IT, 1999b), in conjunction with the Sites 16 and 17 RACR (IT, 1999a), provides documentation that the remedy identified in the RI Sites ROD was completed. The implemented remedy achieves the degree of cleanup or protection specified in the RI ROD for the deletion parcels and no further Superfund response is needed to protect human health and the environment.

Document References

- Harding Lawson Associates (HLA), 1995. *Basewide Remedial Investigation/Feasibility Study, Fort Ord, California*. July 27. AR# BW-1283A
- IT Corporation (IT), 1997. *Remedial Action Work Plan, Remediation Sites, Fort Ord, California*. October. AR# BW-1520D
- IT, 1999a. *Remedial Action Confirmation Report and Post-Remediation Health Risk Assessment. Sites 16 and 17 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California*. April. AR# BW-2021A
- IT, 1999b. *Construction Close-Out Report Sites 16 and 17, Basewide Remedial Investigation Sites, Former Fort Ord, California*. October. AR# BW-2022B
- U.S. Department of the Army (Army), 1997. *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California*. January 13. AR# RI-025
- U.S. Environmental Agency (EPA), 1999. *Letter from the EPA dated September 20, 1999 to the Department of the Army regarding the Draft Final Remedial Action Confirmation Report, Post-Remediation Health Risk Assessment, Sites 16 and 17 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California*. September 20. AR# BW-2021B

Site 25 – Former Defense Reutilization and Marketing Office (DRMO)

Site Background and History

Site 25 is an approximately 11-acre field southeast of the intersection Ninth Street and Fourth Avenue in the northwestern quadrant of the former Fort Ord. The site was historically used for the storage of decommissioned equipment, including electrical transformers. Miscellaneous hazardous wastes, such as waste oil, diesel fuel, and miscellaneous solvents, may also have been stored at the site for varying periods; however, there are conflicting reports regarding such storage.

Prior to 1950, the site served as a prisoner of war camp, officers' quarters, mess hall, administrative building, and warehouse complex. The site was used to store decommissioned equipment from 1950 through 1972, including transformers containing PCBs. After 1972, the site was used periodically for military training exercises and heavy vehicle/equipment parking. All buildings and structures have been removed (HLA, 1996).

The parcel associated with Site 25 that is included in the partial deletion is E2d.3.1.

Remedial Investigation and Feasibility Study

Site 25 was investigated (soil samples collected) as part of the Basewide Installation Restoration Program. Low levels of PCBs (less than one part per million) and pesticides and metals above background concentrations were detected in shallow soil. No volatile compounds, except for acetone, were detected. Low-level pesticide detections were consistent with levels observed in areas where routine application of pesticides has occurred for pest control. Human health and ecological risk assessments were performed to evaluate exposure of chemicals of

potential concern (COPCs) to human health under a residential reuse and construction worker scenario, and to plants and animals present at this site. The results of the risk assessments indicated there are no unacceptable risks to human health and the environment associated with the presence of chemicals at this site and NFA was recommended (Army, 2005).

Selected Remedy

The selected remedy for Site 25 based on the risk assessment is no action (Army, 1997). There are no RAOs for Site 25 because the risk assessment indicated there are no unacceptable risks to human health and the environment associated with the presence of chemicals at this site, and the risk evaluation for Site 25 indicated NFA is required for this site (Army, 2002).

Response Actions

The selected remedy was NFA and allows for unrestricted use (Army, 2002).

Cleanup Levels

No cleanup levels are necessary for the selected remedy.

Operations and Maintenance

There is no completed or ongoing O&M, or implementation of institutional controls associated with Site 25.

Determination that the Criteria for Deletion have been Met

The implemented remedy achieves the degree of cleanup or protection specified in the RI Sites ROD for the deletion parcel and no further Superfund response is needed to protect human health and the environment.

Document References

- Harding Lawson Associates (HLA), 1996. *Draft Final Risk Assessment, Site 25 – Former DRMO, Fort Ord, California*. October 14. AR# BW-0429
- U.S. Department of the Army (Army), 1997. *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California*. January 13. AR# RI-025
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August 23. AR# BW-2167G
- Army, 2005. *Finding of Suitability to Transfer (FOST), Track 0 and Track 0 Plug-in B Parcels, Former Fort Ord, California*. May 31. AR# OTH-222E

Site 31

Site Background

Site 31 is a former dump site in the southern part of the East Garrison and is located within and adjacent to a ravine approximately 0.2 mile southeast of the intersection of Watkins Gate Road and Barloy Canyon Road. This dump site was at the boundary of the Leadership Reaction Training Compound on the northern side of the ravine. The visible extent of disposal encompassed an approximately 500-foot-long section of the northern slope of the ravine. The dump site was reportedly used in the 1940s and 1950s. Reportedly during this time, refuse was wholly or partially incinerated in a 500-ton incinerator, which was adjacent to the ravine, and the incineration waste was dumped over the side of the north side of the ravine. Once the incinerator was dismantled, the Leadership Reaction Training structure was built at the site (Army, 2017).

The site is underlain by fine- to medium-grained sand to silty or clayey sand. Loose to slightly cemented sand outcrops are present in several areas within the ravine (Army, 2017).

Remediation at Site 31 for soil contamination has been completed, as documented in the *Remedial Action Confirmation Report, Site 31 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California* (IT/HLA, 1999). Site 31 is identified for partial deletion for soil. There is no groundwater component to this site. The parcel associated with Site 31 that is included in the partial deletion is L23.3.2.2.

Remedial Investigation and Feasibility Study

The Remedial Investigation (HLA, 1995) for Site 31 was conducted through extensive field sampling through soil gas probes, soil borings, subsurface soil samples, and surface debris mapping. The RI identified the main sources of contamination at Site 31 as surface and subsurface incinerated and unincinerated debris consists of glass, metal, coal, wood, concrete, asphalt, brick and clay tile, and ash. Chemicals detected in soil samples, which appear to be related to the debris, include TPH as diesel; PAHs; dibenzofurans; pesticides; dioxins; and some metals such as lead (IT/HLA, 1999). Although several potential migration pathways have been identified for chemicals found at Site 31, no significant migration pathways in air, surface water, or groundwater existed. An evaluation of the Site 31 soil analytical results indicated that chemicals have not significantly migrated through soil greater than a few feet and therefore should not pose a significant threat to groundwater in the future (HLA, 1995).

The FS (HLA, 1995) was conducted to evaluate human health risk at the site and evaluate the alternative remedies using the CERCLA evaluation criteria. Four alternatives were evaluated:

- Alternative 1: NFA
- Alternative 2: Excavation and Treatment of Soil and Disposal of Debris at OU2, and Deed Restriction
- Alternative 3: Excavation, Consolidation, and Onsite Disposal, and Deed Restriction
- Alternative 4: Excavation and Off-Site Disposal of Soil and Debris, and Deed Restriction

The FS recommended Alternative 2 as the preferred alternative based on the evaluation criteria.

Selected Remedy and Decision Documents

The RI Sites ROD (Army, 1997) identified RAOs for Site 31. At the date of the ROD, the exact future use of the land area was unknown, though the parcel that encompassed Site 31 was planned to become the Monterey Agriculture Center; however, because the slope of Site 31 is so great, it was most likely to be set aside as open space. The RAO was to remove lead-containing soil intermixed with debris above the health-based level of concern of 1,860 mg/kg lead. Based on the lead cleanup level, a single SRU was defined on the north slope of Site 31 with an initial estimated cleanup volume of 350 cy of soil. The remainder of the site was not shown to have a human health or environmental risk and the remaining debris was not proposed for remediation (Army, 1997).

Alternative 2 was the selected remedy. The remedy includes the following components:

- Excavation and segregation of approximately 350 cy of soil and debris containing lead above the ROD-specified cleanup level of 1,860 mg/kg;
- Placement of soil and debris at the OU2 Landfills as part of the foundation later;
- Deed restriction.

Response Actions

The Army completed remediation of Site 31 in June 1998 as detailed in the *Remedial Action Confirmation Report, Site 31 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California* (IT/HLA, 1999).

Remediation at the site included the following actions:

- Excavation of debris and lead-contaminated soil to a depth of 5 feet;
- Placement of the debris and lead-affected soil in the OU2 Landfills;
- Regrading the excavation to blend with surrounding topography;
- Installation of erosion control measures, including hydroseeding.

Approximately 1,500 cy of soil was excavated from the site and placed in the OU2 Landfills. Confirmation sampling was conducted to ensure the RAO was met.

A Post-Remediation Health Risk Assessment (PRHRA) and a Post-Remediation ERA were included as Appendix A to the confirmation report (IT/HLA, 1999). The PRHRA concluded that human health risks and hazards were unlikely to be associated with future site development, and the Post-Remediation ERA concluded that significant risks were not expected for ecological receptors that are exposed to chemicals remaining on site. The RAOs have been achieved and the Army received letters of No Further Action from the EPA on September 20, 1999 (EPA, 1999) and DTSC on June 1, 2006 (DTSC, 2006). DTSC concurred with NFA, provided that long-term management in the form of LUCs is still necessary.

Residential use restriction was placed on deed for Parcel L23.3.2.2.

Cleanup Levels

Confirmation sampling at Site 31 was conducted following excavation to ensure RAOs for the site had been met. All final confirmation samples at Site 31 contained lead concentrations less than the cleanup level of 1,860 mg/kg, demonstrating that the site RAOs was achieved. The maximum lead concentration detected in the confirmation samples was 140 mg/kg (IT/HLA, 1999).

In 2009, State of California published a revised set of soil screening levels based on the new Health Guidance Value, and in 2011 DTSC updated the LeadSpread model. In response, *Final 3rd Five-Year Review Report for Fort Ord Superfund Site* (Army, 2012) recommended an evaluation of the protectiveness of the human health-based cleanup levels for lead at this and other sites. The Army reevaluated protectiveness in the *Revised Final Technical Memorandum Evaluation of Lead Concentrations at Selected Sites, Former Fort Ord, Monterey County, California* (KEMRON, 2019), and found that the site remedy is still protective. Because deed restriction, which prohibits excavation, exposure of soil, or residential development of area, remain in place and exposure to lead in soil is restricted, it is not necessary for the site to meet the residential use screening level of 80 mg/kg lead in soil.

Operations and Maintenance

The land use restrictions have been incorporated into the deed to the underlying property, which was recorded with Monterey County. In addition, State CRUP was recorded with Monterey County.

There are no O&M requirements for Site 31.

Statement of Action Complete

All RAOs as defined in the Basewide RI Sites ROD for Site 31 have been met and all response actions have been completed for Site 31. There are no additional actions found to be necessary for the soil at Site 31.

Document References

- California Department of Toxic Substances Control (DTSC), 2006. *Conditional No Further Action, Draft Final Site 31 Remedial Action Confirmation Report, Basewide Remedial Sites, Former Fort Ord, California*. June 1. AR# BW-2035A.1
- Harding Lawson Associates (HLA), 1995. *Basewide Remedial Investigation/Feasibility Study, Former Fort Ord, California, Volume II & V – Remedial Investigation, Site 31*. October 18. AR# BW-1283A
- IT Corporation/Harding Lawson Associates (IT/HLA), 1999. *Remedial Action Confirmation Report, Site 31 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California*. April 29. AR# BW-2035
- KEMRON Environmental Services (KEMRON), 2019. *Revised Final Technical Memorandum Evaluation of Lead Concentrations at Selected Sites, Former Fort Ord, Monterey County, California*. January. AR# BW-2674C
- United States Department of the Army (Army), 1997. *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California*. January 13. AR# RI-025
- Army, 2017. *4th Five-Year Review Report for Fort Ord Superfund Site, Monterey County, California*. September 8. AR# BW-2834
- U.S. Environmental Protection Agency (EPA) 1999. *EPA Response Re: Draft Final Remedial Action Confirmation Report, Site 31 Remedial Action, Basewide Remediation Sites, Former Fort Ord, California*. September 20. AR# BW-2035B

Site 33

Site Background

Site 33 includes the golf course maintenance area, which consists of a pesticide mixing area, an unpaved surface drainage area, and a former pesticide storage area. The golf course was established in the early 1950s, and pesticides and herbicides have been used regularly since operations began. Pesticides, herbicides, and metals were detected in soil at concentrations below the PRGs set for reuse of this site (Army, 2002). The parcel associated with Site 33 that is included in the partial deletion is F2.7.2.

Remedial Investigation and Feasibility Study

The Remedial Investigation (HLA, 1995) at Site 33 consisted of soil sample borings analyzed for herbicides, pesticides, and metals. Pesticides, herbicides, and metals were detected. The maximum detected concentrations of pesticides and herbicides (up to 11 mg/kg) were in near-surface soil samples, which are below their respective alternate PRGs. Eight metals were detected in soil samples above background concentrations but below the alternate PRGs for the occupational scenario. Risks to human health were screened and evaluated on the basis of an occupational exposure scenario. This exposure scenario is based on the assumption that the site will remain a golf course (HLA, 1994). Results of SRE indicate that, if an occupational scenario is assumed, the risks to human health are acceptably low. The Basewide Ecological Risk Assessment also indicates that exposure by ecological receptors to chemicals at the site is expected to be below levels of concern (HLA, 1995).

No further action was recommended at Site 33 based on the collected data (HLA, 1995). The RI Sites ROD documented a change to the preferred alternative for Site 33 described in the Proposed Plan (no further action). This change included the institutional control of a deed restriction for other than residential type use of the property at the Site 33 Golf Course (Army, 1997).

Selected Remedy and Decision Documents

The RI Sites ROD (Army, 1997) identified RAO for Site 33 to be deed restrictions on the parcel for non-residential use.

Response Actions

There are no response actions at Site 33. Residential use restriction was placed on the parcel.

Cleanup Levels

There are no cleanup levels at Site 33.

Operations and Maintenance

The land use restrictions have been incorporated into the deed to the underlying property, which was recorded with Monterey County. In addition, State CRUP was recorded with Monterey County.

There are no O&M requirements for Site 33.

Statement of Action Complete

All RAOs defined in the ROD (Army, 1997) have been met for Site 33. There are no additional actions found to be necessary for the soil at Site 33.

Document References

- Harding Lawson Associates (HLA), 1994. *Draft Data Summary Report, Site 33 – Golf Course, Fort Ord, California*. March 29. AR# BW-0509
- HLA, 1995. *Basewide Remedial Investigation/Feasibility Study, Former Fort Ord, California, Volume I – Background and Executive Summary*. October 18. AR# BW-1283A
- U.S. Department of the Army (Army), 1997. *Record of Decision, Basewide Remedial Investigation Sites, Fort Ord, California*. January 13. AR# RI-025
- Army, 2002. *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California*. August. AR# BW-2167G

Site 39 – Historical Areas 19D, 20D, 21D, 22D, 24D, 25D, 26D, 35, 35A, 43, 44D/H, 45D/H, 46D/H, 47, 48D, 50D, 59D, 61D, 62, 64D, 75, 76, 110, 111, 112, 113, 114, 115, 116, 117, 158, 160, 167, 173, 176, and 177

Site Background

Site 39 is located in the southwestern portion of the former Fort Ord and includes the approximately 8,000-acre Inland Ranges (the historical Impact Area). Ranges identified within Site 39 for soil remediation are also known as Historical Areas (HAs) and are given numerical designations. Some parcels that are parts of Site 39 were designated for development reuse

based on the *Fort Ord Base Reuse Plan* (FORA, 1997). Future land use information is also included in the HMP, and modifications to the HMP provided in *Assessment, East Garrison - Parker Flats Land Use Modifications, Fort Ord, California* (Zander, 2002) and *Memorandum of Understanding Concerning the Proposed East Garrison/Parker Flats Land-Use Modification* (Army, 2004). This partial deletion includes the development portions of Site 39 except for HA-18D and HA-23D. Munitions response is in progress in the habitat portion of Site 39 that has not been transferred. This partial deletion includes the portion of Site 39 that overlaps the ESCA Interim Action Ranges MRA, both development and habitat parcels, as the munitions response has been completed for the MRA. Within the development portions, additional soil remediation is only required in HA-18D and HA-23D due to lead concentrations above the new lead screening value. The table below shows the HAs with the corresponding Army parcel number.

Historical Areas	Army Parcel Number	Decision documents for associated munitions response sites (see Section 5)
HA-19D	E34	ESCA Group 1 ROD
HA-20D	E34	ESCA Group 1 ROD
HA-21D	E24	ESCA Group 1 ROD
HA-22D	E24	ESCA Group 1 ROD
HA-24D	E29a	Track 2 ROD Del Rey Oaks MRA
HA-25D	E29a	Track 2 ROD Del Rey Oaks MRA
HA-26D	E29a	Track 2 ROD Del Rey Oaks MRA
HA-35	F1.7.2	ESCA Group 3 ROD
HA-35A/HA-75	F1.7.2	ESCA Group 3 ROD
HA-43	E39	ESCA Interim Action Ranges MRA ROD
HA-44D	E40	ESCA Interim Action Ranges MRA ROD
HA-44H	E39, E42	ESCA Interim Action Ranges MRA ROD
HA-45D	E40	ESCA Interim Action Ranges MRA ROD
HA-45H	E39	ESCA Interim Action Ranges MRA ROD
HA-46D	E23.2	ESCA Group 1 ROD
HA-46H	E38, E39, E41	ESCA Interim Action Ranges MRA ROD
HA-47	E38, E39	ESCA Interim Action Ranges MRA ROD
HA-48D	E23.2	ESCA Group 1 ROD
HA-50D	E23.2	ESCA Group 1 ROD
HA-59D	E34	ESCA Group 1 ROD
HA-61D	E29a	Track 2 ROD Del Rey Oaks MRA
HA-62	E29a	Track 2 ROD Del Rey Oaks MRA
HA-64D	L3.2	Track 1 ROD and approval memoranda (NFA)
HA-76D and HA-76H	E21b.3, E40	ESCA Group 1 ROD ESCA Interim Action Ranges MRA ROD
HA-110	E29a, E29a.1, L20.13.3.1	Track 1 ROD and approval memoranda (NFA) Track 2 ROD Del Rey Oaks MRA ESCA Group 3 ROD
HA-111	E29b.1	Track 2 ROD Del Rey Oaks MRA

Historical Areas	Army Parcel Number	Decision documents for associated munitions response sites (see Section 5)
HA-112	E24	ESCA Group 1 ROD
HA-113	E34	ESCA Group 1 ROD
HA-114	E23.1	ESCA Group 1 ROD
HA-115	E23.2	ESCA Group 1 ROD
HA-116	E29b.2	Track 1 ROD and approval memoranda (NFA)
HA-117	E21b.3, E40, L20.18	ESCA Group 1 ROD
HA-158	F1.7.2	ESCA Group 3 ROD
HA-160	L20.3.1, L20.3.2, L20.5.2, L20.5.4	ESCA Group 3 ROD
HA-167	F1.12	Track 1 ROD and approval memoranda (NFA)
HA-173	E29.1, E29.2, E31a, E31b, E31c, E36, L20.13.3.1, L4.1, L4.2	Track 1 ROD and approval memoranda (NFA) Track 2 ROD Del Rey Oaks MRA ESCA Group 3 ROD
HA-176	L3.2	Track 1 ROD and approval memoranda (NFA)
HA-177	L20.3.1, L20.3.2	ESCA Group 3 ROD

The remedy for Site 39 was initially selected in the RI Sites ROD in 1997. Since then, the soil cleanup levels for development areas were adopted, and soil cleanup levels for habitat reserve areas were amended based on Site 39 ROD Amendment (described further in "Selected Remedy" section below). In addition, in 2001 the Army initiated a comprehensive evaluation of former ranges for their potential for soil contamination. The comprehensive Basewide Range Assessment (BRA) report was first developed in 2005 and updated in 2012 (Shaw, 2012). HAs that were found to have levels of soil contamination (e.g., lead) above the cleanup levels were subjected to soil remediation under the RI Sites ROD and the Site 39 ROD Amendment. The BRA reports incorporate updated information for HAs where additional site characterization and remediation are complete. HAs at which contaminant concentrations were below the cleanup levels are identified as requiring no further action.

To date, properties underlying the Site 39 development areas have been transferred, and munitions responses have been completed. Completed munitions responses (to address explosives safety risks) are described in Section 5. Decision documents for munitions response sites associated with the Site 39 development area HAs are identified in the table above.

[HA-19D \(Range 19, Record Firing Range, Development Portion\)](#)

Range 19 is located in the northwestern part of the Inland Ranges, south of Eucalyptus Road and east of General Jim Moore Boulevard. HA-19D includes 3.6 acres in the western corner of Range 19 (Shaw, 2005). Historical documentation indicates that Range 19 was used as a long-distance range without a berm. Range 19 is shown on maps dating back to 1956 and is labeled as Range 19 since 1961. The range fan has changed shape slightly in some years, but the range location has remained consistent. Use of the range is documented in standard operating procedures (SOPs) and on training maps as a Trainfire Record Fire Range from 1973 to base closure. Weapons authorized for use on Range 19 included M-16 and M-14 rifles. Review of

1960 and 1965 air photo mosaics shows a similar vegetation pattern. It appears that some type of training, possibly including the use of small arms, took place in the area of Range 19 in the 1940s and possibly early 1950s based on review of aerial photographs. The specific types of training activities performed in the area during the 1940s and 1950s are not known (Shaw, 2012).

[HA-20D \(Range 20, Development Portion\)](#)

HA-20D is located at the western end of Range 20. Historical documentation indicates the range may have been active during the late 1960s through the early 1970s. The range is shown on training maps from 1967, 1968, and 1972, but is not shown on training maps from 1964 or earlier, and is not evident on aerial photos from 1965 or 1966. Range SOPs from 1973 through 1992 do not list Range 20 as an active range and do not provide evidence that Range 20 was used for small arms or other training (Shaw, 2012).

[HA-21D \(Range 21, 10m Machine Gun/25m Rifle Range, Development Portion\)](#)

HA-21D is located at the western portion of firing Range 21. Range 21 was a small arms range with a berm or backstop. Range 21 is not present on maps or air photos dated before 1968. Evidence of previous ranges cannot be seen on the 1965 air photo mosaic. The 1973 Range SOP indicates that it was a 10-meter machine gun range, later a 25-meter Zero Range was added (1980 through 1993). Weapons authorized for use at Range 21 included the M-60 machine gun and the M-14 and M-16 rifles (Shaw, 2012).

[HA-22D \(Range 22, .50 Cal Machine Gun Range, Development Portion\)](#)

HA-22D is located at the western portion of Range 22. Historical documentation indicates that Range 22 was used as a long-distance range without a berm. Range 22 is not present on historical maps or aerial photos dated before 1984. Historical documents indicate the range was used for .50-caliber machine gun firing. Circa 1990 documents also indicate the range may have been used for 400-meter to 700-meter-range sniper qualification (Shaw, 2012).

[HA-24D \(Range 24, Sniper Range, Development Portion\)](#)

HA-24D is located at the western portion of Range 24. Range 24 was identified as a sniper range in the Basewide RI/FS (Shaw, 2012). The range was used for training activities that required soldiers to engage individual targets by rifle fire out to 1,000 meters. There is also evidence that 40mm practice grenades and sub-caliber light antitank weapons were also deployed on this range (IT, 2000).

[HA-25D \(Range 25, Offensive Overhead Firing Course, Development Portion\)](#)

HA-25D is located at the southern portion of Range 25. Range 25 was used as an Offensive Overhead Firing Range in the Basewide RI/FS (Shaw, 2012). Soldiers fired small arms into a berm (backstop) while soldiers passed through a trench behind the berm (IT, 2000).

[HA-26D \(Range 26, Machine Gun Transition, Development Portion\)](#)

HA-26D is located at the southwestern portion of Range 26. Range 26 was a machine gun transition course at the time of base closure. Past records indicate Range 26 may have also been used for training with 3.5-inch rockets, 37mm projectiles, and mortars (Shaw, 2012).

[HA-35](#)

HA-35 is also identified as the Mock Village Training Area on the 1945 training map and is also known as the Military Operations in Urban Terrain (MOUT) complex. It is also identified as a

Combat Pistol Range that was active beginning at least as early as 1975. Range 35 is listed in the 1973 SOP as a “Quick Kill” range. SOPs from 1980 through 1992 indicate that the range consisted of six firing lanes and was authorized for 38-caliber and 45-caliber pistol fire. The range was transferred for like-use (not residential or sensitive use) (Shaw, 2012).

The underlying property was transferred to FORA in 2009 as part of the ESCA. Under the 2009 deed, the allowable uses are activities associated with the investigation and remediation of MEC, a facility for law enforcement tactical training (MOUT training area), and installation of utilities and roadways until MEC remedial action was deemed complete. As described in Section 5, MEC remedial action was completed in 2018, and the deed will be modified to reflect the selected remedy. The long-term designated use for the property is non-residential development use (FORA, 1997) and as a training facility for tactical/law enforcement training and emergency service provider training by Monterey Peninsula College (Army, 2014). Based on the continued use of the site as a training facility, no further investigation for soil contamination is required. It was investigated as part of HA-158. See section HA-158 for further discussion.

HA-35A

HA-35A is located in the western portion of the MOUT (HA-158). This range is co-located with HA-75 and was used as a combat pistol range from at least 1975. Range SOP information from September 1980 through 1992 indicate that the range had 6 firing lanes and was authorized for 38 and 45 caliber pistol firing (Shaw, 2012). The range is part of the 2009 property transfer of the MOUT site to FORA (see discussion for HA-35).

HA-43 (Range 43, Platoon Size Live Fire Course, Mortar Course)

HA-43 is located in the Ranges 43-48 area in the Impact Area Munitions Response Area. HA-43 was used for training from at least the mid-1940s. This area was used as a mortar firing range through the 1980s and possibly as early as the 1950s. A platoon-sized live fire course was constructed in 1991 and was used until 1993. Review of range standard operating procedures from 1991 and 1992 indicate that small arms ammunition was used on this range in 1991 and 1992 (Gilbane, 2014).

HA-44D/H (Range 44, Antitank Weapons Range, Development and Habitat Portions)

HA-44D/H are located in the northern part of the historical Impact Area and was used as an Antitank Range from at least 1973 through 1993. HA-44 falls within the area defined as “Company Problems” on a 1945 training map. Based on the 1991 Range SOPs, weapons authorized for firing at this range were the recoilless rifle rocket launcher and the M47 Dragon missile rocket launcher. The types of ammunition used included 90mm for the recoilless rifle, M72 sub-caliber devices, 66mm HE, M202 Flash, AT4, and Dragon HE (Shaw, 2012).

HA-45D/H (Range 45, Grenade Launcher Range, Development and Habitat Portions)

HA-45D/H are located in the northern portion of the historical Impact Area and was used as a grenade launcher range from at least 1973 through 1993. Range 45 falls within an area identified as “Company Problems” on a 1945 training map. According to historical documentation, the weapons authorized for firing at this range was the M79/203 grenade launcher (Shaw, 2012).

HA-46D/H (Range 46, Pistol Range, Development and Habitat Portions)

HA-46D/H are located in the northern part of the Inland Ranges and was used as a pistol range, Military Police/Criminal Investigation Division (MP/CID) qualification course, night record fire, and 10-meter machine gun range from as early as the 1960s, and possibly as early as 1958.

Range control records from 1973 through 1993 indicate the range was used as a MP/CID qualification course through much of that period. This range contained a berm that was located just to the north of the habitat/development boundary within the habitat area (Shaw, 2012).

HA-47 (Range 47, M79 Grenade Launcher Range)

HA-79 is located southeast of the designated development portion of HA-46 with the downrange area of HA-47 overlapping the designated habitat portion of HA-46. HA-47 was used prior to 1970 for live fire of high-explosive 40mm; a component of these grenades included RDX. No information is available regarding the standard operating procedures for HA-47 range operations. Aerial photographs from the 1960s show the area cleared of vegetation. The range was abandoned in 1970 (Shaw, 2012).

HA-48D (Range 48, 14.5mm Artillery and Mortar Range, Subcaliber Range, Development Portion)

HA-48D is located at the northwestern portion of Range 48 in the northern part of the Inland Ranges and was used as a training range from at least the mid-1940s. The range is identified as a mortar range on a 1945 training map. Other documented uses also include a 14.5mm artillery and mortar sub-caliber range, a light anti-tank weapon (LAW) range, and a sniper training range. In 1982, the range was identified as a sniper training range. Ammunition authorized for use during that time included 5.56mm, 7.62mm, .50-caliber spotter, and .50-caliber machine gun small arms ammunition, and 106-recoilless rifle sub-caliber ammunition. Range 48 was later identified as an anti-armor sub-caliber range in the 1992 Range SOPs. Weapons authorized for use at this range were the M72 LAW, 90mm recoilless rifle, AT-4, M2-2 rocket launcher, and the M47 Dragon (Shaw, 2012).

HA-50D (Booby Traps, Development Portion)

HA-50D is located at the northwestern portion of Range 50, near the northwestern boundary of the Inland Range, between HA-18D and HA-48D. This range was identified as a Booby Traps area on a 1945 training facilities map. The range is not present on the circa 1954 map. Evidence of cleared areas in the site vicinity is visible on 1949 and 1951 aerial photographs (Shaw, 2012).

HA-59D (M-1 Table IX, Development Portion)

HA-59D is located at the western end of the range identified as M-1, Table IX on a 1956 Range Construction Priority Map. It is not known if this range was ever constructed and it is not shown on subsequent 1950s era maps. This range was located closer to General Jim Moore Boulevard than other ranges. Reconnaissance activities in 1999 completed as part of the Site 39 Additional Sampling Work plan development did not indicate the presence of a range in this area (Shaw, 2012).

HA-61D (A.R. Table VIII, Development Portion)

HA-61D, Automatic Rifle (A.R.) Table VIII, is located south of A.R. Table VII Range (HA-61) and is overlapped with HA-25D. This area has the "A.R." designation which indicates that the range was used for automatic rifle training. The footprint of this range was investigated through reconnaissance and limited mapping in March 1999 and July 1999 (Shaw, 2012). This historical area was sampled and evaluated as part of Range 25 sampling and remediation efforts (IT, 2000). Refer to HA-25D for more information.

HA-62 (Machine Gun Transition)

HA-62 was identified on the 1945 training map as a Machine Gun Transition area and it is west of Range 26. It is also present on a 1961 training map (Shaw, 2012).

HA-64D (Range 64, Rifle Night Firing, Development Portion)

HA-64D is located at the southern portion of Range 64, an area designated as a Night Firing Course on a 1956 range construction priority map. This range is not shown on 1958 and 1961 training maps and is not evident on 1965 aerial photographs (Shaw, 2012). Range 64 encompasses Range 27. Range 27 is located within the habitat portion of Site 39, and HA-64D (the development portion of Range 64) does not overlap Range 27.

HA-75 (Mock-Up Village, Combat Cities)

HA-75 was identified as Mock-Up Village in the 1940s. The Mock-Up Village is labeled in the 1947 7.5 min quadrangle map of Seaside. In the 1950s this area is labeled as Combat in Cities (Shaw, 2012). Refer to section HA-35A for additional documentation.

HA-76 (Company Problems)

HA-76 is located in the northern part of the Impact Area and was labeled as Company Problems on the 1945 training map. It is not known what type of training was conducted in the Company Problem area. HA-76 is within the Range 43-48 area (Shaw, 2012). Refer to HA-44D/H, 45D/H, 46D/H, and 48D for more information because HA-76 was evaluated as part of these HAs.

HA-110 (MRS-DRO.1, Del Ray Oaks)

HA-110 was included in the BRA Literature Review Report (IT, 2002), which recommended no further investigation. HA-110 also includes HA-24D, HA-25D, HA-26D, HA-61D, and HA-62, where small arms ammunition investigations were conducted (Shaw, 2012). Refer to sections HA-24D, HA-25D, HA-26D, HA-61D and HA-62 for activities relating to these sites.

HA-111 (MRS-DRO.2, Del Ray Oaks)

This site is located outside the central area of the former Impact Area that contained high densities of MEC. No small arms ranges were identified within HA-111 (Shaw, 2012).

HA-112 (MRS-SEA.1, Seaside 1)

HA-112 is located on the western edge of the former Impact Area adjacent to General Jim Moore Boulevard. HA-112 includes HA-21D, HA-22D, HA-23D, where site reconnaissance, soil sampling, and remediation were conducted (Shaw, 2012). Refer to sections HA-21D and HA-22D for activities relating to these sites. HA-23D remains on the NPL since elevated lead concentrations remain and remediation will be required.

HA-113 (MRS-SEA.2, Seaside 2)

HA-113 is located just north of HA-112 on the western edge of the former Impact Area adjacent to General Jim Moore Boulevard (Shaw, 2012). The development portions of Range 19 and Range 20 are within the HA-113 boundaries. Refer to sections HA-19D and HA-20D for activities relating to these sites.

HA-114 (MRS-SEA.3, Seaside 3)

HA-114 is located on the edge of the former Impact Area adjacent to Eucalyptus Road. The far western part of HA-18D is within the HA-114 boundaries (Shaw, 2012). HA-18D remains on the NPL since elevated lead concentrations remain and remediation will be required.

HA-115 (MRS-SEA.4, Seaside 4)

HA-115 is located on the northern edge of the Impact Area adjacent to Eucalyptus Road. The eastern portion of HA-18D, HA-46D, and HA-48D are within the HA-115 boundaries (Shaw, 2012). Refer to sections HA-46D and HA-48 for activities relating to these HAs. HA-18D remains on the NPL since elevated lead concentrations remain and remediation will be required.

HA-116 (MRS-MOCO.1, Monterey County 1)

HA-116 (MOCO.1) is located in the southwestern portion of the former Impact Area. No historical ranges have been identified within the HA-116 boundaries (Shaw, 2012).

HA-117 (MRS-MOCO.2, Monterey County 2)

HA-117 is located east of HA-115 along the northern boundary of the former Impact Area (Shaw, 2012). HA-44D, HA-45D, and HA-76D are within the boundaries of HA-117, refer to sections HA-44D, HA-45D, HA-76D for activities relating to these sites.

HA-158 (MRS-28, MOUT Site)

HA-158 includes Impossible City, which was a facility used for military munitions operations in urbanized terrain (MOUT) training. Several buildings within the city were live-fire small arms sites. Also, a tire house with sand-filled tires was constructed. Live small arms fire and use of high explosive were authorized (Shaw, 2012). This site includes HA-35, HA-35A and HA-75. The underlying property was transferred to FORA in 2009 as part of the ESCA. Under the 2009 deed, the allowable uses are activities associated with the investigation and remediation of MEC, a facility for law enforcement tactical training (MOUT training area), and installation of utilities and roadways until MEC remedial action was deemed complete. As described in Section 5, MEC remedial action was completed in 2018, and the deed will be modified to reflect the selected remedy. The long-term designated use for the property is non-residential development use (FORA, 1997) and as a training facility for tactical/law enforcement training and emergency service provider training by Monterey Peninsula College (Army, 2014). Based on the continued use of the site as a training facility, no further investigation for soil contamination is required.

HA-160 (MRS-30, Laguna Seca Turn 11)

HA-160 was part of the Impact Area since at least 1945. The December 1956 Training Areas map shows the area as a training site (Shaw, 2012).

HA-167 (MRS-35, Former Range Control)

HA-167 was formerly used as Camp Huffman from at least the late 1930s through the 1950s and was designated as Range Control in the 1960s through base closure. The property was transferred to BLM in 1996 and is currently used as BLM Work Center (Army, 2011).

HA-173 (MRS-43, South Boundary Area)

HA-173 was reportedly active in the 1940s. According to the former Fire Chief, a portion of the ridge at this site was used as a backstop for rifle grenades and shoulder-launched projectiles

from 1942-1944. Firing positions (trenches) were excavated along South Boundary Road, and firing was from the southeast to the northwest at a diagonal to the hill (Shaw, 2012).

HA-176 (MRS-46, York School)

HA-176 consists of 67 acres along the southern boundary of the former Impact Area. HA-176 is located behind ranges 27 and 27A, which had been used as close-combat and machine gun rifle ranges, respectively (Shaw, 2012).

HA-177 (MRS-47, Wolf Hill)

HA-177, Wolf-Hill, is located on the southern boundary of the former Fort Ord, just north of the Laguna Seca Race Track. It lies within the former Impact Area and within the Wolf Hill Training Area, according to a 1957 training map. MEC removal action was conducted in 1997. Reconnaissance for evidence of small arms use and ranges was conducted in July 1999 which resulted in the discovery of several small arms (ball round) casings and blank small arms casings, but no evidence of a range (Shaw, 2012).

Remedial Investigation and Feasibility Study

The objectives of the RI at Site 39 (HLA, 1995) were to collect sufficient data to assess: (1) the lateral and vertical extent of potential contamination at selected ranges within the Inland Ranges, (2) the potential presence of munitions-related chemical residues and metals at range target areas and in groundwater beneath Site 39, (3) the potential for metals contamination in soil from spent ammunition in the small arms ranges, (4) the approximate distribution of munitions and explosives of concern, (5) the potential threat to human health and the environment from SRCs, and (6) potential remedial measures, if needed.

The investigations at the small arms ranges were based on the approach used at Site 3, the Beach Trainfire Ranges:

- Identifying the types of spent ammunition present in the small arms ranges.
- Conducting a visual survey of the distribution of spent ammunition along the lines of fire, at targets, and at backstops or open areas behind the targets.
- Taking measurements to confirm range boundaries and target locations.

The methodology and results of the Site 3 investigation were used to draw general conclusions about the distribution and potential impacts resulting from spent ammunition at the Site 39 small arms ranges. Because the results of the Site 3 RI indicated visual mapping was an effective way to evaluate the distribution of spent ammunition, a visual survey was conducted at Site 39 between May 16 and 20, 1994. The survey consisted of traversing ranges along lines of fire and near targets and estimating the occurrence and percentage of surface area covered by spent ammunition. The investigation results indicated:

- Spent ammunition consists primarily of various caliber bullets and lesser amounts of black powder rifle balls and lead shot.
- Because the spent ammunition is similar to that at Site 3, the main potential contaminant, as at Site 3, is expected to be lead.
- In general, most of the areas within the small arms ranges contain less than 1 percent surface coverage of spent ammunition.
- A few localized areas have a bullet surface coverage of 1 to 10 percent or greater than 10 percent.
- Based on the soil and groundwater analyses and evaluation of fate and transport properties of site contaminants performed for the Site 3 investigation, there is little

potential for migration of contamination to deep soil or groundwater in the small arms ranges.

Potential for explosives safety risk associated with MEC was subsequently addressed under the MMRP.

Selected Remedy and Decision Documents

The selected remedies for the RI sites, including Site 39, are described in the RI Sites ROD (Army, 1997). The selected remedy addresses risks to human health from lead contamination in soils co-located with bullets and constituents of explosives in soils from munitions usage at the Site 39 Inland Ranges. The selected remedy for the Site 39 Inland Ranges is “Excavation and Onsite Placement at the Operable Unit 2 Landfill Beneath a Cap” at the former Fort Ord based on the protection of human health for reuse of the site as development and habitat reserve (Army, 1997).

In 1997, the designated reuse for portions of Site 39 changed from habitat reserve to development uses, including residential in some areas (FORA, 1997). For Site 39 development areas that could include residential use, EPA residential PRGs apply. Most of the HAs in this summary report were identified for development (KEMRON, 2019). Four parcels (Parcels E38, E39, E41 and E42) are designated as habitat reserve.

Explanation of Significant Differences, Excavation and Segregation of Spent Ammunition from Soil, Site 39, Former Fort Ord, California issued in December 2003 describes a change in the remedy selected for lead-contaminated soil at the small arms ranges at Site 39. The portion of the remedy for Site 39 that addressed the small arms ranges included segregation and recycling of spent ammunition from soil containing lead prior to placement of the soil at the OU2 Landfills. Segregation and recycling of spent ammunition prior to placement at the OU2 Landfills was found to be of significant public concern, and technically and economically impractical. Therefore, the Army eliminated these procedures from the remedy for the small arms ranges at Site 39 (Army, 2003).

In 2008, a PRHRA was conducted for soil contamination at Seaside transfer Parcels 1 through 4 (Shaw/MACTEC, 2008). The PRHRA was conducted to evaluate the potential human health risks and hazards associated with exposure to residual contaminants remaining in soil and evaluate the need for restricting residential land usage based on predicted risks to hypothetical residents. The report concluded that, based upon the conservative evaluation of potential risks and hazards under post-remediation conditions, adverse non-cancer health effects and cancer risks are considered unlikely to be associated with future commercial or residential development at the Seaside parcels under the exposure conditions evaluated. In addition, due to the reduction in human health risks following the remediation of Ranges 18, 19, 21, and 46, a restriction on residential development was not recommended.

Based on the remedial actions that had been implemented and additional studies, a re-evaluation of the selected remedy for Site 39 was developed and presented in *Final Feasibility Study Addendum, Site 39 Inland Ranges, Former Fort Ord, California* (MACTEC, 2008). Based on the FS Addendum, *Final Record of Decision Amendment Site 39, Former Fort Ord, California* (Site 39 ROD Amendment; Army, 2009) established revised cleanup levels, identified a larger volume of soil for remediation, confirmed the OU2 Landfills as the destination for the contaminated soil, eliminated the need to conduct a post-remediation risk assessment, and eliminated the need for institutional controls related to the soil contamination (Army, 2009).

In September 2009, OEHHA published a revised set of soil screening levels based on the new health guidance values. This new health guidance value establishes a benchmark of 1 µg/dL

increase in lead content of blood, which is significantly lower than the previous blood-lead level of 10 µg/dL used in the development of cleanup levels (Army, 2012). In 2011, DTSC updated the LeadSpread model (LeadSpread 8) that had been used in the Human Health Risk Assessment (HHRA) contained in Volume III of the Basewide RI/FS (HLA, 1995). The updated version incorporates the new health guidance value, and is designed to assess residential land use scenarios, but considers only lead in soil and dust. Since the revised OEHHA health guidance value for lead in blood and the methodology used to calculate the human health-based cleanup levels for Site 39 may affect protectiveness of human health, development portions of Site 39 was evaluated using 80 mg/kg as a residential screening level for lead (KEMRON, 2019). In September 2018, the toxicity criteria for lead that limits the increase in blood lead levels to 1 µg/dL was promulgated. Both the *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites, Former Fort Ord, Monterey County, California* stated that all development portion of Site 39 are protective of future site users except for HA-18D and HA-23D (Army, 2017 and KEMRON, 2019). Part of Parcels E23.1, E23.2, and E24, where HA-18D and HA-23D are located, will be excluded from this deletion process.

Response Actions

Following the RI Sites ROD, additional reconnaissance and characterization activities were conducted for some of the Site 39 HAs prior to remediation. Some HAs were found to not require remediation. The additional reconnaissance and characterization and follow on remediation are described for each HA below.

HA-19D (Range 19, Record Firing Range, Development Portion)

Initial site characterization was conducted from November 1998 through February 1999. Site characterization included preliminary visual reconnaissance and mapping of the surface distribution of spent ammunition and the collection of soil samples to evaluate existing concentrations of metals. Results showed that spent ammunition was concentrated along target lines and along firing lines, especially near the target boxes. Results of the sampling indicated lead concentrations in soil exceeded the EPA Region IX residential PRG of 400 mg/kg, primarily adjacent to the target lines. Based on this information, additional sampling was conducted in 2002 to further characterize the site for remediation. The remediation boundaries and depths of excavation were established based on a review of site characterization results (Shaw 2012).

The remedial action at HA-19D was conducted from September to October 2002, including the following activities (Shaw, 2005 and 2012):

- Excavating approximately 1,400 cy of soil containing accumulated spent ammunition and residual lead in areas where lead concentrations in soil were greater than 400 mg/kg.
- Removal of targets and target lines.
- Over-excavation of 15 cy following confirmation sampling conducted during remediation.
- Confirmation samples represent the soil remaining in place.
- Disposing of the excavated soil in the OU2 Landfills.

Confirmation sampling following completion of remedial action resulted in left-in-place lead concentrations with a maximum of 240 mg/kg and a range average of 41 mg/kg (Shaw, 2005). No further action is required at HA-19D. The protectiveness of the remedy implemented at HA-19D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-20D (Range 20, Development Portion)

Reconnaissance and mapping were performed at Range 20 in June 1999 and May 2001 because the range appears on historical usage maps. Although no significant evidence of historical range use was observed during reconnaissance and mapping, a random sampling program was implemented to verify that no significant chemical problems were present (Shaw, 2012).

Soil samples were collected at the site in July 2001. Samples were analyzed for antimony, copper, and lead because the site was identified as a small arms range. Metals concentrations ranged from 1.5 mg/kg to 15.6 mg/kg for lead, and 0.98 mg/kg to 6.2 mg/kg for copper. Antimony was qualified as non-detect in all samples. Samples collected from below the ground surface were not analyzed because the detected metals concentrations from surface samples were below the Fort Ord maximum background concentrations, which is 50 mg/kg for lead (Shaw, 2012).

No further action is required at HA-20D. The protectiveness of the remedy implemented at HA-20D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-21D (Range 21, 10m Machine Gun/25m Rifle Range, Development Portion)

HA-21D includes the western portion of Range 21. Site reconnaissance was conducted at this range in November 1998. A firing line, firing points, a berm and spent small arms ammunition areas of less than 1 percent, 1 to 10 percent, and greater than 10 percent were mapped during reconnaissance. In the vicinity of the firing points the spent small arms ammunition concentrations were 1 to 10 percent. The berm, which was located to the east of the firing line, was 15 to 20 feet tall. The berm and the adjacent area behind it include an area with greater than 10 percent lead concentrations on the ground surface (Shaw, 2012).

Results of sampling indicated lead concentrations in soil exceeded the EPA residential PRG of 400 mg/kg, primarily on the berm that served as a backstop for the range and within a relatively small area behind the berm. As part of the remediation activities, the berm and soil containing concentrations of lead in excess of 400 mg/kg were removed (Shaw, 2012).

The remedial action at HA-21D was conducted from September 1999 through November 2000, including the following activities (Shaw, 2003 and 2012):

- Excavating approximately 9,600 cy of soil containing accumulated spent ammunition and residual lead.
- Collection of confirmation samples during remediation and analyzing for lead, antimony, and copper.
- Over-excavation of hot spots.
- Collection of final confirmation samples that represent soil left in place.
- Disposing of the excavated soil in the OU2 Landfills.

Confirmation sampling following completion of remedial action resulted in left-in-place lead concentrations with a maximum of 570 mg/kg and a range average of 35 mg/kg (Shaw, 2003).

No further action is required at HA-21D. The protectiveness of the remedy implemented at HA-21D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-22D (Range 22, .50 Cal Machine Gun Range, Development Portion)

Site reconnaissance and sampling was conducted in 1999. Targets and areas of greater than 10 percent bullet density were observed. Range-related debris was identified in various locations, some of which included empty ammunition boxes and other miscellaneous scrap. The highest lead concentration from 24 samples collected at HA-22D was 26.2 mg/kg (Shaw, 2012).

No further action is required at HA-22D. The protectiveness of the remedy implemented at HA-22D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-24D (Range 24, Sniper Range, Development Portion)

Mapping of HA-24D in 1994 indicated several target areas where spent ammunition covered 1 to 10 percent of the ground surface. Mapping and sampling conducted in 1999 indicated maximum lead concentrations of 13,700 mg/kg. Remedial action occurred from July to August 1999, and targets and soil with lead concentrations in excess of 400 mg/kg were removed (Shaw, 2012). Approximately 16,100 cy of soil were removed from Range 24 from an approximate area of 7.6 acres with an average excavation depth of 1.3 feet (IT, 2000).

Confirmation sampling following remedial action resulted in lead concentrations with a maximum of 320 mg/kg and a range average of 35 mg/kg (IT, 2000).

No further action is required at HA-24D. The protectiveness of the remedy implemented at HA-24D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-25D (Range 25, Offensive Overhead Firing Course, Development Portion)

Mapping of HA-25D indicated greater than 10 percent spent ammunition in a berm at the range. Soil sampling results indicated a maximum lead concentration of 25,500 mg/kg at the site, greater than the EPA residential PRG of 400 mg/kg. As a part of remediation activities from June to September 1999, the target berm was excavated to a depth of 10-feet below the bottom of the original ground surface to remove all spent ammunition and soil with lead concentrations in excess of 400 mg/kg (Shaw, 2012). Approximately 9,600 cy of soil were removed from two excavation areas at Range 25 (which also includes HA-61D), representing a total area of 2.3 acres to an average excavation depth of 2.1 feet.

Confirmation sampling following remedial action results indicated a maximum lead concentration of 250 mg/kg and range average of 33 mg/kg (IT, 2000).

No further action is required at HA-25D. The protectiveness of the remedy implemented at HA-25D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-26D (Range 26, Machine Gun Transition, Development Portion)

Site characterization sampling was conducted in 2001 and 2002 at HA-26. The highest lead concentration collected at HA-26D was 17.8 mg/kg (Shaw, 2012).

No further action is required at HA-26D. The protectiveness of the remedy implemented at HA-26D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-35

HA-35 was investigated as part of HA-158 reconnaissance (Shaw, 2012). See section HA-158.

HA-35A

The property has been transferred for long-term designated use as a training facility for tactical/law enforcement training and emergency service provide training by Monterey Peninsula College (Army, 2014). Based on the continued use of the site as a training facility, no further investigation for soil contamination is required (Army, 2007a).

HA-43 (Range 43, Platoon Size Live Fire Course, Mortar Course)

Site characterization identified a 0.1 acre of soil requiring remediation for lead. Approximately 150 cy of soil was excavated from HA-44 in the identified area of 0.1 acre to a depth of 1 foot in February 2010. Confirmation sampling indicated a range wide weighted average of 152 mg/kg for lead, less than the cleanup level of 225 mg/kg.

The *Final Remedial Action Completion Report Site 39 Inland Ranges Habitat Reserve* indicates the remedial action objectives at the range have been achieved and no additional excavation is required (Gilbane, 2014).

HA-44D/H (Range 44, Antitank Weapons Range, Development and Habitat Portions)

Soil samples were collected in 1994 during the Basewide RI/FS. Both explosives and metals were detected above the established screening levels. Range 44 was included within the Ranges 43-48 where interim remedial action for MEC was conducted from 2003 to 2005. Additional soil sampling following MEC removal resulted in explosive and lead concentrations above screening levels (Shaw, 2012).

Soil remedial action at Range 44, including both development and habitat areas, was conducted in August through September 2010 with the majority of the remediation activity taking place within the habitat portion of Range 44. Approximately 4,070 cy of soil were excavated and transported for disposal at the OU2 Landfills. Confirmation sampling indicated that range-wide weighted average concentrations for explosives (0.11 mg/kg for RDX; 0.40 mg/kg for HMX; and 0.08 mg/kg for TNT) and lead (28.7 mg/kg) were less than the remedial action objectives (Shaw, 2011).

No further action is required at HA-44D or HA-44H. The *Final Remedial Action Completion Report, Site 39 Inland Ranges Habitat Reserve* indicates the remedial action objectives at the range have been achieved and no additional excavation is required (Gilbane, 2014). The protectiveness of the remedy implemented at HA-44D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-45D/H (Range 45, Grenade Launcher Range, Development and Habitat Portions)

Ten soil boring were assessed for metals and explosives in 1994 as part of the Basewide RI/FS. Based on the analytical results, no further action was initially recommended for this range. HA-45 was included within Ranges 43-48 where interim remedial action for MEC was conducted from 2003 to 2005. As part of the MEC remedial action conducted at Range 45, the top 2 feet of soil was scraped and sifted for MEC in 2005 (within the development parcel). Sifted soil was returned to the scraped area after MEC removal action was completed (Parsons, 2007).

Reconnaissance of HA-45 was recommended to identify any targets or accumulations of spent small arms ammunition from use as a Company Problems training area. Reconnaissance activities were completed in fall 2004 and followed by soil sampling from six locations within the Range to analyze for explosives and metals. Sample results indicated that all explosive compounds were below laboratory reporting limits for collected surface samples. All surface lead concentrations were below the characterization goal of 225 mg/kg. Antimony results ranged from non-detect to 1.04 mg/kg, cadmium results ranged from non-detect to 0.41 mg/kg, and copper results ranged from 4.35 to 10.4 mg/kg (Shaw, 2012).

No further action is required at HA-45D or HA-45H. The protectiveness of the remedy implemented at HA-45D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-46D (Range 46, Pistol Range, Development Portion)

Initial site characterization was conducted from November 1998 through February 1999 (HLA, 1999). Site characterization included preliminary visual reconnaissance and mapping of the surface distribution of spent ammunition and the collection of soil samples to evaluate existing concentrations of metals. Results showed that spent ammunition was concentrated on the berm that served as a backstop for the range and within a relatively small area behind the berm. Results of the sampling indicated lead concentrations in soil exceeded the EPA Region IX residential PRG of 400 mg/kg, primarily at the berm. Site characterization was completed up to the berm (Shaw, 2012).

The remedial action at HA-46D was conducted from September 1999 through October 1999, including the following activities (Shaw, 2003 and 2012):

- Excavating approximately 3,900 cy of soil containing accumulated spent ammunition and residual lead.
- Collection of confirmation samples during remediation and analyzing for lead, antimony, and copper.
- Over-excavation of hot spots.
- Collection of final confirmation samples that represent soil left in place.
- Disposing of the excavated soil in the OU2 Landfills.

Confirmation sampling following completion of remedial action resulted in left-in place lead concentrations with a maximum of 215 mg/kg and a range average of 26 mg/kg (Shaw, 2003).

Note that remedial action at HA-46D overlapped with portions of HA-46H, although cleanup levels for development parcels were followed for entire excavated area.

No further action is required at HA-46D. The protectiveness of the remedy implemented at HA-46D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-46H (Range 46, Pistol Range, Habitat Portion)

As HA-46H and HA-47 overlap reconnaissance and site characterization for these two sites were completed together. Reconnaissance conducted within HA-46H and HA-47 in 2004 indicated the possibility of metals contamination related to small arms use. Samples were collected and analyzed for antimony, copper, lead, and explosives in the portion that overlapped with HA-47. One sample detected a lead concentration of 302 mg/kg, higher than range-wide average was less than 225 mg/kg. Additional soil sampling was conducted in 2011 at the

overlap of HA-46H and HA-47. Samples were again analyzed for lead and explosives. All results were below the respective screening levels. Based on the sampling results, no further action was recommended for HA-46H (Shaw, 2012).

HA-47 (Range 47, M79 Grenade Launcher Range)

HA-47 overlaps with HA-46H. Reconnaissance and site characterization for these two sites were completed together. See HA-46H for further description. No further investigation was recommended for HA-47 (Shaw, 2012).

HA-48D (Range 48, 14.5mm Artillery and Mortar Range, Subcaliber Range, Development Portion)

Reconnaissance was performed at HA-48D in June 1999, which indicated a firing line and two rows of targets were present within HA-48D. Empty casings, links, two observation towers, a weapons cleaning area, and a mess area were also identified (Shaw, 2012).

Soil samples were collected in July 2001 and analyzed for antimony, copper, and lead. The highest lead concentration from 22 samples collected at HA-48D was 167 mg/kg (Shaw, 2012). All lead analytical results were below the EPA PRG of 400 mg/kg.

No further action is required at HA-48D. The protectiveness of the remedy implemented at HA-48D was confirmed in *4th Five Year Review* and the *Revised Final Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-50D (Booby Traps, Development Portion)

This area was mapped during site reconnaissance conducted in October 2001. Expended blank casings, .50-caliber links, and concrete debris were found in the site vicinity during reconnaissance. No evidence of a range, including targets, firing lanes, or fighting positions, was encountered. Because no evidence was identified that this area was used as a range, no further action was recommended (Shaw, 2012).

HA-59D (M-1 Table IX, Development Portion)

Reconnaissance activities completed did not indicate the presence of a range in this area. Based on the results of the reconnaissance, no further action was recommended (Shaw, 2012).

HA-61D (Range 61, A.R. Table VIII, Development Portion)

Reconnaissance, soil sampling, and remediation at HA-61D (A.R. Table VIII) were conducted along with HA-25D activities. Refer to HA-25D for more information.

No further action is required at HA-61D. The protectiveness of the remedy implemented at HA-61D was confirmed in *4th Five Year Review* and the *Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites* (Army, 2017 and KEMRON, 2019).

HA-62 (Machine Gun Transition)

Reconnaissance of HA-62 was completed in May 2001. Small quantities of machine-gun links and soil pits were mapped in the area. The soil pits are believed to be holes that were dug during MEC removal operations. A large disturbed area was mapped in the vicinity where the links were identified. Two target boards were also mapped. Because no evidence of range-specific activities was identified at HA-62, no further action was recommended (Shaw, 2012).

HA-64D (Rifle Night Firing, Development Portion)

Reconnaissance of HA-64 in areas other than the overlapping area with HA-27 mapped shell casings and areas of less-than-1-percent spent small arms ammunition in May 2001. Most were in areas that were eroded, or in areas where small arms ammunition overshot from HA-27. A possible spotting station and firing point were also mapped. There was no evidence of ranges other than HA-27. No further action was recommended for HA-64D (Shaw, 2012).

HA-75 (Mock-Up Village, Combat in Cities)

Reconnaissance of HA-75 was completed in 1991, see HA-35A for further documentation.

HA-76 (Company Problems)

Reconnaissance activities were performed in fall 2004 at portions of the site not already overlapping with Ranges 43 through 46. No accumulations of spent small arms ammunitions or evidence of MEC were identified outside of HA-43 through HA-46 during the reconnaissance. As a result, no soil sampling was proposed. Based on the site reconnaissance, no further action was recommended for activities relating to HA-76 (Shaw, 2012).

HA-110 (MRS-DRO.1, Del Ray Oaks)

Based on literature review, no soil contamination is suspected for activities relating to HA-110 outside of Ranges 24, 25, and 26. Refer to HAs 24D, 25D, and 26D for more information. No further action was recommended for HA-110 (Shaw, 2012).

HA-111 (MRS-DRO.2, Del Ray Oaks)

Based on literature review and because no small arms ranges were identified within HA-111, no soil contamination is suspected. As such, no further action was recommended for HA-111 (Shaw, 2012).

HA-112 (MRS-SEA.1, Seaside 1)

Reconnaissance was proposed in areas of HA-112 with the highest concentration of munitions found during previous munitions response actions. Reconnaissance was conducted in 2004 in an attempt to identify areas of stressed vegetation or evidence of impacts to soil due to explosive compounds or metals. No further action was recommended for HA-112 based on the results of the reconnaissance (Shaw, 2012). HAs 21D and 22D are also located within this range. Refer to HAs 21D and 22D for more information.

HA-113 (MRS-SEA.2, Seaside 2)

Reconnaissance was proposed in the southern portion of HA-113 areas where 40mm practice munitions were found during previous munitions response actions. Reconnaissance was conducted in 2004 in an attempt to identify areas of stressed vegetation or evidence of impacts to soil due to explosive compounds or metals. No further action was recommended for HA-114 related activities based on the results of the reconnaissance (Shaw, 2012). HAs 19D and 20D are also located within this range. Refer to HAs 19D and 20D for more information.

HA-114 (MRS-SEA.3, Seaside 3)

No soil contamination was suspected based on literature review of previous munitions response actions. No further action was recommended for this site (Shaw, 2012). HA-18D is located within this range, but it is not part of the deletion process since remediation is recommended.

HA-115 (MRS-SEA.4, Seaside 4)

Reconnaissance was proposed in the western portion of HA-115 where a cluster of practice hand grenades and high explosive munitions were found during previous munitions response actions. Reconnaissance was conducted in 2004 in an attempt to identify areas of stressed vegetation or evidence of impacts to soil due to explosive compounds or metals. No further action was recommended for HA-115 based on the results of the reconnaissance (Shaw, 2012). HA-46D and HA-48D are located within HA-115 boundaries. Refer to these two ranges for more information. HA-18D is not part of the deletion process.

HA-116 (MRS-MOCO.1, Monterey County 1)

A literature review was conducted for HA-116 and no ranges were identified within this HA. In addition, no MEC was identified during MEC sampling in 1999. Therefore, no further action is recommended for the site following this review (Shaw, 2012).

HA-117 (MRS-MOCO.2, Monterey County 2)

Reconnaissance activities were performed at HA-117 in fall 2004. Additional reconnaissance activities were completed for HA-44D and HA-45D. At HA-117, one target backstop area was identified with small arms ammunition at concentrations of 1 to 10 percent. Based on the presence of small arms backstops and accumulations of spent small arms ammunition, five soil sample locations were identified and samples were collected at the surface, 1-foot, and 2-foot bgs in October 2006. All samples were analyzed for antimony, copper, and lead. Antimony and lead were not detected above the laboratory reporting limits and copper results ranged from 2.2 to 18.6 mg/kg, which are below the Fort Ord specific PRG of 2,500 mg/kg. Based on the soil sample results, no further action is recommended for the site (Shaw, 2012).

HA-158 (MRS-28, MOUT Site)

Reconnaissance was completed in October 2001. Small arms ammunition including blank casing and live blanks were found at the site. Some of the military munitions items encountered included expended signal flares, smoke grenades, mortars, three 3.5-inch rockets, three 40mm practice grenades, one live projectile simulator and additional munitions related debris. During the site visit, one fighting position and six target boards were mapped. In addition, abundant spent ammunition was exposed on the ground surface, but was not mapped (Shaw, 2012). As the site remained an active training area, no further action was recommended at the time of the BRA reconnaissance. Surface removal of MEC was conducted in 2003. The property was subsequently transferred for long-term designated use as a training facility for tactical/law enforcement training and emergency service provider training by Monterey Peninsula College (Army, 2014). Based on the continued use of the site as a training facility, no further investigation for soil contamination is required (Army, 2007a).

HA-160 (MRS-30, Laguna Seca Turn 11)

MEC removal action to 4-ft depth was conducted in 1995, and 30 to 40 feet of fill material was placed over most of MRS-30 in support of construction activities associated with the expansion of Laguna Seca Raceway Turn 11 (Army, 2007a). Because 30 feet of fill was placed over the site, no further action was recommended (Shaw, 2012).

HA-167 (MRS-35, Former Range Control)

A reconnaissance of the area where MEC was encountered during surface removal was conducted in 1999. No evidence of a range was identified. No further action was recommended for the HA due to the low number of military munitions found at the site (Shaw, 2012).

HA-173 (MRS-43, South Boundary Area)

Sampling was recommended to evaluate whether explosive residue was present in the area where 37mm projectiles were recovered after military munition sampling and removal operations were completed in the northern portion of the site. Soil samples were collected in July 2002. Perchlorate and explosives were included in the sample analyses, but were not detected in any of the surface soil samples. Based on the analytical results that indicate no residue of explosive compounds in soil, no further action was recommended for the site (Shaw, 2012).

HA-176 (MRS-46, York School)

The BRA Literature Review Report recommended further data review after additional OE investigation (IT, 2002). MRS-46 was investigated for MEC, including sampling, a digital geophysical survey in a 31-acre lease area, and visual reconnaissance. No MEC or munitions debris was found during the digital survey. No further action regarding munitions response was required for MRS-46 (Army, 2006). On the basis of the completed MEC investigation, no further BRA evaluation was identified for HA-176 (Army, 2007b). The property was subsequently transferred to York School in 2011.

HA-177 (MRS-47, Wolf Hill)

Site reconnaissance for evidence of small arms use and ranges was conducted in July 1999, resulting in the discovery of several small arms (ball round casings and blank small arms casings), but no evidence of a range. Site inspection and soil samples were collected in July 2002. The explosive compounds 2,4-dinitrotoluene and p-nitrotoluene were detected in two samples. Site characterization samples were collected in 2004 based on the results of site inspection sampling. Step-out soil sampling at the two locations where explosive compounds were detected was conducted and two biased samples at the low point of a drainage were also collected. Additional soil samples were also collected in 2007 to fill in the data gaps associated with two sample locations.

Samples collected in 2004 and in 2007 were all below the method detection limits for explosives. The detections of 2,4-dinitrotoluene and p-nitrotoluene in the site inspection samples (original samples) were below the EPA regional screening levels for residential use. Based on the results, no further action was recommended for the site (Shaw, 2012).

Cleanup Levels

The HAs in the development portions of Site 39 were cleaned up to meet the EPA Region IX residential PRGs. These values are 400 mg/kg for lead, 2,905 mg/kg for copper and 31.3 mg/kg for antimony (Shaw, 2005).

The screening level of 80 mg/kg for lead was used to evaluate the development portion of Site 39 and is based on OEHHA benchmark change in blood lead concentration criteria and the DTSC methodology for calculating risk-based soil preliminary remediation goals (Army, 2017).

The Site 39 ROD Amendment (Army, 2009) established revised cleanup levels that apply to habitat areas of the site. They are ecological based range-wide weighted average cleanup levels of 225 mg/kg for lead, 3.1 mg/kg for RDX, 5.9 mg/kg for TNT, and 2.7 mg/kg for HMX.

Operations and Maintenance

The PRHRA was conducted for chemical contamination at Seaside transfer Parcels 1 through 4 to evaluate the potential human health risks and hazards associated with exposure to residual contaminants in soil and evaluate the need for restricting residential land usage based on

predicted risks to hypothetical residents. Based on the conservative evaluation of potential risks and hazards under post-remediation conditions, adverse non-cancer health effects and cancer risks are considered unlikely to be associated with future commercial or residential development at the Seaside parcels under the exposure conditions evaluated. In addition, due to the reduction in human health risks following the remediation of Ranges 19, 21, and 46, a restriction on residential development was not recommended. No remediation of Ranges 20, 22, 23, and 48 was necessary based on the sampling results. Reconnaissance of HA-50, HA-59, and HA-112 through 115 did not indicate the potential for chemical contamination. The amount of risk due to exposure to lead in soil is below the levels of concern established by CalEPA and EPA (Shaw/MACTEC, 2008).

As a follow-up to the 3rd Five-Year Review, an additional evaluation was conducted by the Army to determine the protectiveness for Site 39 (Army, 2017). Results of the evaluation were presented in the *Final Technical Memorandum Evaluation of Lead Concentrations at Selected Sites* (KEMRON, 2019). Based on the results presented in the memorandum, the remedial actions performed for the development ranges except for HAs 18D and 23D are protective of future site users (KEMRON, 2019).

There is no completed or ongoing O&M, or implementation of institutional controls associated with the soil remedy at the Site 39 development HAs. For HA-18D and HA-23D, residential use restriction will be placed to be in effect until additional remediation is conducted.

Within the habitat parcels included in the partial deletion, soil remediation was conducted in HA-43 and HA-44H. These areas are subject to habitat restoration and monitoring according to established protocols. Monitoring results are reported annually to the U.S. Fish and Wildlife Service.

Statement of Action Complete

Site 39 remedial actions performed for the development areas are protective of current and future site users with the exception of HA-18D and HA-23D (Army, 2017). This conclusion was reached based on the results of completed investigations and remedial actions, and *Revised Final Technical Memorandum Evaluation of Lead Concentrations at Selected Sites* (KEMRON, 2019). Site 39 remedial actions for the four habitat reserve parcels included in the partial deletion is complete, as described in the *Final Remedial Action Completion Report, Site 39 Inland Ranges Habitat Reserve* (Gilbane, 2014).

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Site 3

Site Background

Site 3, the Beach Trainfire Ranges (780 acres), extends approximately 3.2 miles along the coastline of Monterey Bay at the western boundary of Fort Ord and was used for small arms training beginning in the 1940s. In general, trainees fired small arms weapons from firing lines in the eastern portion of the site toward targets spaced at various intervals to the west. Spent ammunition (individual cartridge casings from a firearm in which the propellant [powder] has been ignited and vaporized [fired]) and the projectiles accumulated on the east-facing (leeward) sides of the sand dunes that formed the "backstops" for the targets. The fragmented projectiles from target impacts resulted in soil contamination with lead. Site 3 was transferred in September 2006 to the Department of Interior and conveyed to the State of California, Department of Parks and Recreation (DPR) for use as a public park and public recreation area (now Fort Ord Dunes State Park). These lands currently include open space, hiking trails, and ancillary facilities; campgrounds are planned for the future in areas outside of former firing ranges. The excavation of contaminated soil on this site is complete (Shaw, 2000). Site 3 is identified for partial deletion for soil. There is no groundwater component to this site. The parcels associated with Site 3 that are included in the partial deletion are S3.1.1, S3.1.2, and S3.1.4.

Remedial Investigation and Feasibility Study

The objectives of the RI were to collect sufficient data to assess: (1) the lateral and vertical extent of potential contamination, (2) the potential threat to human health and the environment from SRCs, and (3) the potential remedial measures, if needed. There were five proposed tasks to be completed during the RI: (1) source characterization, (2) soil contamination investigation, (3) air sampling investigation, (4) groundwater contamination investigation, and if necessary (5) ecological receptor investigation. Based on the evaluation of the data collected during the first three tasks, the groundwater investigation was not considered necessary. Lead was found to be the primary contaminate due to it being the highest concentration in soil and its high toxicity. Lead concentrations in the soil followed a vertical distribution, extending to a depth of 1 to 2 feet bgs. Because the occurrence of lead in only shallow soils and groundwater data from nearby wells indicating no detection of lead contamination, there is little potential for groundwater contamination (HLA, 1995).

The FS was conducted to evaluate the health-based levels of concern at the Site and evaluate the proposed alternative remedies using the CERCLA evaluation criteria. Three remedial alternatives were evaluated:

- Alternative 1: NFA
- Alternative 2: Excavation, screening and soil treatment
- Alternative 3: Excavation, screening, and onsite disposal

The FS recommended alternative 3, excavation of the material with screening and onsite disposal, as the preferred alternative based on the evaluation criteria.

Selected Remedy and Decision Documents

The Interim ROD, Site 3 (Army, 2005) identified RAOs based on the proposed reuse for the site as a state park consisting mostly of open space. The RAOs for the protection of human health at Site 3 are to reduce the potential adverse health effects associated with noncarcinogenic SRCs by remediation to health-based levels of concern.

A human health-based level of concern of 1,860 mg/kg was developed for lead in soil for Site 3. Concentrations of lead above 1,860 mg/kg occurred mainly in areas where greater than 10 percent of the surface area was covered by spent ammunition. Although some areas with moderate bullet distribution contained lead above the human health-based level of concern, the Ecological Risk Assessment (ERA) recommended remediation only in areas of heavy bullet distribution to minimize impacts to the sensitive ecological habitat. Therefore, the SRU for Site 3 is defined by those areas of heavy bullet distribution (greater than 10 percent surface coverage by bullets).

The selected remedy consisted of mechanical and hand excavation of soil in areas with greater than 10 percent coverage of spent ammunition, followed by mechanical separation using screens and gravity-feed separation techniques.

The Site 3 Interim ROD (Army, 1997) deferred evaluation of ecological risks, which were subsequently finalized in the *Record of Decision, No Further Action Related to Munitions and Explosives of Concern-Track 1 Sites; No Further Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22)* (Army, 2005).

Response Actions

The Army has completed the remedial action at Site 3 in accordance with CERCLA and the Site 3 Interim ROD (Army, 1997). The remedial action included excavation of soil contaminated with lead and associated spent ammunition. Approximately 162,800 cy of impacted soil were removed from Site 3, of which approximately 129,200 cy was transported to the screening plant for separation of spent ammunition from soil. The remaining 33,600 cy, composed of approximately 26,700 cy of vegetation and 6,900 cy of soil from over-excavated areas (containing little spent ammunition), were not screened and were used as general fill at the OU2 Landfills, Area E. Of the screened material, approximately 42,000 cy were used for the foundation layer at Area E; 49,200 cy were used for the foundation layer at Area F; and 38,000 cy were used as general fill at Area E. Approximately 719,000 pounds of spent ammunition recovered from the screening operations were recycled and reclaimed at an off-site facility.

After excavation, confirmation soil samples were collected, and the dunes were re-contoured to provide a more natural appearance. All final confirmation samples had reported lead concentrations of less than 1,860 mg/kg and, therefore, met the human health-based cleanup level of 1,860 mg/kg for lead, as defined in the ROD. The average lead concentration in soil remaining in the firing ranges following the remedial activities was 161 mg/kg. For individual firing ranges, the average lead concentrations ranged from 13.1 mg/kg to 385 mg/kg. The post-remediation HHRA stated that unacceptable human health risks and hazards are considered unlikely to be associated with future recreational, commercial, or residential development of Site 3 under the exposure conditions evaluated (IT, 2000). The post-remediation ERA concluded that significant risks to herbivorous birds and carnivorous/omnivorous mammals from exposure to residual chemicals remaining in the soil at Site 3 are not expected (HLA, 1998). Potentially significant risks were identified for two "hot spot" areas where chemical concentrations in soil were elevated. However, significant risks to populations of small mammals and plants from exposure to residual chemicals in soil are not expected. The soil remediation resulted in the site being available for its intended use as a public park and public recreation area.

The 2005 ROD (Army, 2005) stipulates that Site 3 is protective of ecological receptors and that NFA is necessary. Ecological monitoring would be conducted to confirm the results of the evaluations conducted previously. The 2005 ROD required this data to be evaluated during Five-Year reviews to assess the need for continued ecological monitoring and to ensure the

decision remains protective of the environment. Overall, the 2005 ROD requires NFA with monitoring at Site 3.

Cleanup Levels

Given the conservative assumption based on the proposed use of the site, that a nearby resident, visitor, or onsite park ranger would possibly be exposed to lead only in the areas with moderate and heavy bullet distribution, a health-based cleanup level of 1,860 mg/kg of lead in soil was developed to apply to areas of greater than 10 percent surface coverage by spent ammunition per the Interim ROD (Army, 1997).

Based on the ERA, the Interim ROD (Army, 1997) deferred the environmental cleanup level for lead. The 2005 ROD (Army, 2005) stated that No Further Remedial Action was required (with monitoring) because: (1) a substantial portion of bullets and contaminated soil have been removed from the site; (2) data collected before and after cleanup show that the remaining average site-wide concentration of lead in soil is 161 mg/kg; and (3) the ecological sampling to date has shown that the cleanup appears to be protective of populations of plants and animals at the site.

In response to the Revised California Human Health Screening Levels for Lead, Integrated Risk Assessment Branch, OEHHA, CalEPA (CalEPA, 2009), the *Technical Memorandum Evaluation of Lead Concentrations at Selected Sites, Former Fort Ord, Monterey County, California* (KEMRON, 2019), reviewed Site 3. The property was transferred for its intended use for park and recreational activities and not for residential purposes. The remedy was found to be protective of human health (KEMRON, 2019).

Operations and Maintenance

The 2005 ROD (Army, 2005) stipulates that ecological monitoring would be conducted in accordance with an approved work plan. This data would be evaluated in conjunction with previous ERA and evaluation data during the Five-Year Reviews to assess the need for continued ecological monitoring and make sure the decision remains protective for the environment.

Ecological monitoring was conducted at the Site per the Habitat Restoration and Monitoring Plan (Shaw, 2008) and reported in annual reports. The *Final 2016 Annual Biological Monitoring Report, Fort Ord Dunes State Park, Former Fort Ord, California* (Chenega, 2016) determined that no additional monitoring is required at Site 3. Based on the finding of buckwheat survivorship in the remediated and non-remediated areas (92%, 98% respectively) in the 2015/2016 monitoring season, the difference was not statistically significant and could be a result of other factors besides lead contamination.

The area of former Site 3 is now Fort Ord Dunes State Park. Per the *Fort Ord Dunes State Park Memorandum of Understanding and Land Use Covenant between DTSC and Department of Parks and Recreation* (DTSC, 2007), it is the State's internal agreements that DPR is responsible to collect spent lead bullets uncovered over time and place in appropriate containers on site. The Army has agreed that, provided the DPR staff collect spent bullets and notify the Army, the Army will collect spent bullets and either recycle the material or properly dispose of it through the Army's hazardous waste disposal process (Army, 2006).

The most recent Five-Year Review (Army, 2017) finds that the remedy at Site 3 is protective of human health and the environment. The LUCs and access restrictions in effect for the State Park continue to provide human health protection and there is no evidence of any impacts to human health or the environment in the unrestricted land use areas of Site 3. It should be noted

that based on the results of the most recent Five-Year Review, Site 3 will continue be included in future Five-Year Reviews until such a time as all LUCs have been removed.

There are no O&M requirements for Site 3.

Statement of Action Complete

All RAOs as defined in the Interim and 2005 RODs have been met and all response actions have been completed for Site 3. There are no additional actions found to be necessary for the soil at Site 3.

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OU1 – Fritzsche Army Airfield Fire Drill Area

Site Background and History

The Fritzsche Army Airfield (FAAF) Fire Drill Area (FDA) was established in 1962 as a training area for the Fort Ord Fire Department in the west portion of the FAAF. As part of training activities, waste fuel (primarily composed of outdated or water-contaminated JP-4) was discharged from an onsite storage tank into a pit, ignited, and then extinguished. Other fuels included hydraulic and lubrication oils, gasoline, diesel, and solvents. Training activities at the FDA were discontinued in 1985 and the associated structures (pipeline and storage tank) were removed. These training activities are believed to have resulted in the release of contaminants to soil and groundwater (Army, 2017).

The first site investigation was conducted at the FDA in 1984, which led to the conclusion that soil and groundwater cleanup were required in this area. The area was designated as Operable Unit 1. Groundwater monitoring within OU1 began in January 1986 and ended in December 2015.

Remedial action completion has been achieved at OU1, as described in the *Final Closeout Report, Operable Unit 1 Groundwater Remediation, Fritzsche Army Airfield Fire Drill Area, Former Fort Ord, California* (HGL, 2017). In 2020, the *Draft Final Technical Summary Report — Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2 Former Fort Ord, California*, was developed in response to requests from EPA and DTSC for additional information regarding the potential presence of PFAS compounds at former Fort Ord. The FAAF FDA is recommended for further PFAS groundwater investigation (Ahtna, 2020). The recommended investigation will be completed independent of the completed OU1 remediation and not associated with the OU1 ROD. Groundwater is not considered for partial deletion at this time.

Only the OU1 soil remedial unit (SRU) is identified for partial deletion at this time. The parcels associated with OU1 that are included in the partial deletion are S2.1.2 and downgradient S2.1.5.

Remedial Investigation and Feasibility Study

The scope of the Remedial Investigation (RI) at the FDA included:

- Defining the extent of surface and subsurface soil contamination.
- Assessing the hydrogeologic characteristics of the uppermost aquifer at the FDA.
- Identifying the types and concentrations of contaminants in groundwater.
- Delineating the extent of groundwater contamination.

The results of the RI indicated:

- The primary chemicals of concern (COCs) in surface and shallow soil were light and heavy total petroleum hydrocarbons (TPH). Soil generally contained low concentrations of TPH (light or heavy) with sporadic detections of volatile organic compounds (VOCs).
- The primary COCs in groundwater were benzene, trans-1,2-dichloroethene, methyl ethyl ketone, and trichloroethene (TCE). The highest concentrations were detected in groundwater from wells within and downgradient (north) of the FDA.

The Feasibility Study (FS) recommended the following remedies for soil and groundwater:

- Soil excavation, land farming, and in situ biodegradation.

- Groundwater extraction and treatment with granular activated carbon (GAC).

The FAAF FDA is recommended for further investigation for groundwater PFAS concerns. No additional soil investigation is recommended as the AFFF impacted soils at the site were removed as part of the response action in 1987. The response action, soil removal, eliminated the source of contamination (Ahtna, 2020).

Selected Remedy

The OU1 Record of Decision (ROD) was finalized in 1995 and stated the contaminated soils at the FDA had been remediated (Army, 1995). The OU1 ROD defined groundwater extraction and treatment as the selected remedial action for OU1 groundwater. The remedial action objectives (RAOs) specified in the OU1 ROD are (1) hydraulic control and containment of contaminated groundwater, and (2) extraction and treatment of groundwater exceeding aquifer cleanup levels (ACLs). The second objective is expressed in terms of aquifer concentrations for ten specific COCs, all of which are VOCs.

In 2010, the U.S. Department of the Army (Army) signed an Explanation of Significant Differences (ESD) that addressed the expanded remediation efforts needed at OU1 (Army, 2010). The primary factors driving the need for the ESD were:

- The TCE plume migrated outside the capture zone of the original GWETS. Because the TCE plume extended downgradient of the former Fort Ord property boundary and under the adjacent property (Armstrong Ranch), the size and configuration of the remedial action were altered.
- The size of the remedial action changed, which caused significant increases in the costs from those estimated in the OU1 ROD.
- Land use controls (LUCs) regarding contaminated groundwater at Fort Ord were signed after the OU1 ROD was signed. These LUCs prohibit the use of groundwater from OU1 without permission from State and county regulators, thereby eliminating potential exposure pathways.

Response Actions

In 1987, approximately 4,000 cubic yards (cy) of contaminated soil were removed from the FDA, and the area was then backfilled with clean fill (soil). Excavated soils were spread over the area of the former FDA to a depth of 2.5 to 3 feet above the original ground surface and remediated using treated groundwater supplemented with an aqueous nutrient formulation to stimulate microbial degradation of hydrocarbons in the soil (HLA, 1994).

Groundwater remediation efforts began in 1988 by initiating the groundwater extraction and treatment system (GWETS). The GWETS included two extraction wells placed downgradient from the FDA connected to a GAC treatment system located within the former FDA footprint. This remediation system is identified as the “original GWETS” to distinguish it from subsequent treatment areas. Treated groundwater from the GWETS was recharged to the groundwater through a spray irrigation system at the FDA (HGL, 2017).

In response to the significant change in the size and configuration of the plume, the Army constructed the Northwest Treatment System (NWTS) in 2006 (with augmentation in 2007 and 2010), and the Off-Site GWETS that operated in 2008 and 2009 (HGL, 2016). These treatment facilities also used GAC to remove the COCs from groundwater.

In a letter dated September 8, 2011, the USEPA concurred with the Army’s determination that the OU1 remedy was “operating properly and successfully” (USEPA, 2011).

Cleanup Levels

The results of the field investigation and subsequent risk assessment performed during the OU1 remediation confirmation study using the data collected during the investigation indicated the post-remediation concentrations of COCs present in soil do not present a risk to human health or ecological receptors under the proposed land use, which calls for the property to be included as protected habitat as part of the University of California Natural Reserve System. Therefore, soil remediation is complete at the site (HLA, 1994).

Analytical data indicate RAOs have been met for groundwater at OU1. To verify the site conditions are protective of site receptors and allow for future beneficial use to occur, human health risks were calculated based on exposure to site groundwater using the most recent attainment monitoring analytical results from December 2015. The overall cumulative cancer risk and non-cancer hazard indices are all less than the corresponding risks based on the use of cleanup targets, indicating current conditions meet and exceed risk-reduction objectives corresponding to the ROD cleanup targets. Based on these comparisons and the completion of the cleanup within the source area, the requirements of the OU1 ROD have been met and remediation of OU 1 groundwater may be considered complete (Army, 2017). Future PFAS groundwater investigation associated with the site will be conducted independently of the OU1 ROD.

Operations and Maintenance

There are no treatment systems operations and maintenance (O&M) activities currently required at OU1. The original GWETS and associated equipment were decommissioned and removed from the site in 2014. The NWTS and all remaining OU1 wells were decommissioned in 2016 as part of site closure. The Off-Site GWETS and the treated water discharge pipeline were decommissioned and removed in 2014, and the off-site OU1 monitoring wells, extraction wells, and associated pipeline were decommissioned in 2016 (HGL, 2017).

OU1 groundwater contamination was limited to the A-Aquifer. Although this aquifer is not used for drinking water purposes, the OU1 area is located within the Consultation Zone of the Special Groundwater Protection Zone established by Monterey County. In accordance with Monterey County Code Title 15, Chapter 15.08.140, construction of any proposed well in the Consultation Zone must be permitted by the Monterey County Health Department in consultation with the Army, U.S. Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), and California Central Coast Regional Water Quality Control Board (RWQCB).

Determination that the Criteria for Deletion have been Met

All RAOs as defined in the OU1 ROD have been met and all response actions have been completed for OU1. There are no additional actions found to be necessary for soil at OU1. In March 2016, EPA, DTSC, and RWQCB determined OU1 remediation is complete and EPA concurred with the recommendation for site closure (Army, 2017). There are no soil PFAS concerns at the site. The recommended PFAS investigation at the FAAF FDA will be conducted separately from OU1; groundwater is not included in the NPL deletion at this time.

The implemented remedy achieves the degree of cleanup or protection specified in the OU1 ROD for the deletion parcels and no further Superfund response is needed to protect human health and the environment.

Document References

- Ahtna Environmental, Inc. (Ahtna), 2020. *Draft Final Technical Summary Report – Perfluorooctanoic Acid and Perfluorooctane Sulfonate Basewide Review of Historical Activities and Groundwater Monitoring at Operable Unit 2, Former Fort Ord, California*. February 27. AR# OU2-722A
- Harding Lawson Associates (HLA), 1986. *Remedial Investigation/Feasibility Study of Soil Contamination, Fire Drill Area, Fort Ord, California*. April 14. AR# OU1-044
- HLA, 1987a. *Addendum, Remedial Investigation/Feasibility Study of Soil Contamination, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California*. June 1. AR# OU1-059
- HLA, 1987b. *Remedial Investigation/Feasibility Study of Groundwater Contamination, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California*. June 5. AR# OU1-060
- HLA, 1988. *Operation and Maintenance Manual, Soil and Ground-Water Treatment System, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California*. July 25. AR# OU1-096
- HLA, 1994. *Draft Final OU1 Remediation Confirmation Study, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California*. May 3. AR# OU1-248
- HydroGeoLogic, Inc. (HGL), 2016. *Final Remedial Action Completion Report/Technical Memorandum, Operable Unit 1 Attainment Monitoring Results, Sampling Events #1 through #4, Former Fort Ord, California*. March 16. AR# OU1-623A
- HGL, 2017. *Final Closeout Report, Operable Unit 1 Groundwater Remediation, Fritzsche Army Airfield Fire Drill Area, Former Fort Ord, California*. December. AR# OU1-631A
- U.S. Department of the Army (Army), 1996. *Record of Decision, Operable Unit 1, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California*. May 8. AR# OU1-362
- Army, 2010. *Explanation of Significant Differences No. 1 Operable Unit 1, Fritzsche Army Airfield Fire Drill Area, Fort Ord, California*. August 6. AR# OU1-581
- Army, 2017. *Final 4th Five-Year Review Report for Fort Ord Superfund Site, Monterey County, California*. September 8. AR# BW-2834
- U.S. Environmental Protection Agency (USEPA), 2011. *EPA has received the Army letter requesting designation of Operating Properly and Successfully (OPS) dated 9/8/2011 and finds that the Army has provided sufficient information to confirm proper design and operation of the groundwater system. EPA concurs and the work conducted at the OU1 site fulfills the requirements for Interim Remedial Action completed*. September 8. AR# OU1-590A
- U.S. Environmental Protection Agency (EPA) Region IX, 2016, *Remedial Action Completion: Operable Unit 1, Former Fort Ord, California*. March 28. AR# OU1-623A.3

OU2 – Fort Ord Landfills, Area A Only

Site Background

The Operable Unit 2 (OU2) formerly included six landfill cells, one cell north and five cells south of Imjin Road, covering approximately 150 acres. The north landfill (Area A, north of Imjin Road) was used from 1956 to 1966. The main landfill (cells B through F, south of Imjin Road) was operated from 1960 until 1987. The main landfill stopped accepting waste for disposal in May 1987 because of the initiation of interim closure of the facility (Army, 1994). Only Area A is identified for partial deletion for soil. All other portions of the landfill and OU2 groundwater plume remain on the NPL.

The Area A landfill was used for residential and on-base commercial waste disposal. The Area A was an irregularly-shaped area of approximately 33 acres. Waste was generally placed in parallel trenches typically 30 feet wide that extended 10 to 12 feet bgs. Overall, refuse was placed to within approximately 2 feet of the ground surface and covered with soil. Sports fields, courts, and playgrounds were later constructed over the landfill for use by residents of housing units bordering the site to the north, east, and west (IT, 2001).

As part of the remedial action at Area A, waste was removed and consolidated into the main landfill (Areas B through F) south of Imjin Road. Confirmation sampling and post-remediation screening risk assessment supported the clean-closure of Area A.

Only the OU2 Area A soil remedial unit (SRU) is identified for partial deletion at this time. The parcels associated with OU2 Area A that are included in the partial deletion are L5.6.1, L5.6.2, E4.3.1.1, E4.3.1.2, and E4.6.1.

Remedial Investigation and Feasibility Study

In 1986, the preliminary environmental investigation of the OU2 Landfills were initiated (IT, 2001). Field activities for Remedial Investigation were performed in two phases. The first phase (Phase I) began in January 1990, which included the following activities (D&M, 1993):

- Drilling and sampling of 12 soil borings which were converted to groundwater monitoring wells;
- Drilling and sampling of 16 shallow soil borings;
- Excavation of six test pits;
- Soil gas survey of four areas in and around the former landfills;
- Monitoring well development and pump installation; and
- Quarterly groundwater sampling.

The second phase (Phase II) began in January 1992 and included the following activities (D&M, 1993a):

- Drilling and sampling of eleven soil borings which were converted to groundwater monitoring wells;
- Monitoring well development and pump installation;
- Collection of 41 surface soil samples;
- Electromagnetic geophysical survey;
- Soil gas survey of specific areas not covered during Phase I; and
- Quarterly groundwater sampling.

A trench investigation was performed in Landfill Area A in March 1993.

The results of the RI found no VOCs detected in soil samples, with the exception of toluene as a suspected sample method contaminant and not associated with the site. Metals were detected in all soil samples, but all concentrations were comparable to background concentrations (IT, 2001). Based on the RI results, subsurface soil is not of concern, but waste present in the landfill materials appears to be a source of chemical migration into the underlying groundwater, and therefore is of concern. Chemicals of concern were detected in soil vapor at very low concentrations, but soil gas is considered to be of concern for the purposes of determining appropriate post-closure soil gas control to respond to state requirement, specifically 14CCR, Chapter 3, Article 7.8. The results of RI also showed that the groundwater appeared to have been affected by the landfills as chemicals of concern were detected above federal and state maximum contaminant levels (MCLs) for drinking water (D&M, 1993b).

The FS recommended the following remedies for landfill and groundwater (D&M, 1993b):

- Cap over landfill area; vapor control included in cap design.
- A-Aquifer and 180-Foot Aquifer groundwater removal, treatment and recharge to the subsurface.
- Groundwater monitoring.

Selected Remedy and Decision Documents

The OU2 Landfills ROD (Army, 1994) presents the selected remedial action for the OU2 Landfills, including Area A. When the OU2 Landfills ROD was prepared, placing an engineering cover system, or cap, over all landfill cells was planned, with excavation on the perimeter of the northern portion of the landfill. Subsequent evaluations indicated that all of Area A and some perimeter areas of the main landfill should be removed and consolidated into the main landfill south of Imjin Road. This approach would provide fill material necessary to construct the landfill cap cover system for the main landfill and consolidate landfill waste. In addition, the need for cap maintenance and monitoring in the area north of Imjin Road would be eliminated (Army, 1996).

An Explanation of Significant Differences (Army, 1996) was developed for Area A. The selected remedial action for soil at Area A as explained in the ESD includes the following (IT, 2001):

- Excavation of the Area A Landfill refuse and impacted soil, and disposal as general fill at the remaining OU2 Landfill;
- Cleanup of soil in the excavated areas to the Fort Ord preliminary remediation goals; and
- Installation of an engineered cover system over the remaining landfill.

Response Actions

The remedial action at Area A was conducted in accordance with the requirements of the OU2 Landfills ROD (Army, 1994) and the ESD (Army, 1996). Excavation at Area A was conducted between July 4, 1996 and January 17, 1997 with a small volume of soil removed in October 1998 after further review of confirmation samples. Excavation at Area A was conducted using track-mounted excavators with buckets and support equipment included front end loaders, bulldozers, and haul trucks. During excavation, the refuse trenches were discovered to be wider and deeper than previously estimated. As a result, the quantity of refuse removed from the area was greater than originally anticipated (IT, 2001).

Excavation continued until visible debris was removed and confirmation sampling demonstrated that the cleanup levels for Area A were met. Approximately 585,000 cy of refuse were excavated during the remediation of Area A and placed and compacted as part of the general fill

in Areas B, C, D, and F of the OU2 Landfills. An additional 376,000 cy of material unimpacted by refuse were removed and used as backfill at other former Fort Ord remedial action sites, as well as for the vegetative layer and foundation layer of the OU2 Landfill. Confirmation sampling was performed to demonstrate that cleanup goals were met through removal of waste and affected soil at Area A. Additional excavation and secondary rounds of sampling were performed in locations where analytical results exceeded the PRGs listed in the ESD. There were no more than two additional rounds of overexcavation and three rounds of sampling associated with any sample location (IT, 2001).

After confirmation sampling and visual inspection of Area A indicated that cleanup goals were achieved, site restoration and re-grading was completed.

Cleanup Levels

Relatively few contaminants were found during the RI phase of Area A. As such, the target analytes for Area A confirmation sampling were chosen to include a broad spectrum of potential contaminants including and following required analyses:

- VOCs,
- SVOCs,
- Pesticides and PCBs,
- Purgeable Petroleum Hydrocarbons,
- Extractable Petroleum Hydrocarbons and,
- Priority Pollutant Metals.

Results of analyses were to be compared against Fort Ord PRGs as identified in the ESD (Army, 1996). If additional chemicals were present not included in the ESD, EPA Region IX residential PRGs were to be used as cleanup criteria.

Confirmation sampling results at Area A were almost all below the Fort Ord PRGs. A few results exceeded the Fort Ord PRGs but were less than the corresponding EPA residential PRGs (PCBs and Dieldrin). The only results that exceeded both the Fort Ord and EPA residential PRGs (PCBs) were from locations adjacent to Abrams Drive that appeared to be related to engineered fill used in that area rather than the refuse in Area A (IT, 2001).

A Post-Remediation SRE was conducted for Area A to evaluate potential risks to human receptors from chemicals remaining in soil following remediation of the site. The SRE indicated that adverse non-carcinogenic health risks to future residential receptors at the site were not anticipated to occur. A comparison of maximum chemical concentrations at the site to EPA Region IX PRGs for residential receptors indicated that potential cancer risks associated with maximum chemical concentrations at the site were within EPA's risk management range. A cumulative estimated cancer risk demonstrated that chemical concentrations in soil at the site were unlikely to pose an incremental cancer risk of concern for hypothetical residential receptors (IT, 2001).

Operations and Maintenance

Because the RAOs for removal of refuse and impacted soil at Area A were achieved based on the OU2 Landfills ROD and ESD, there are no remedial systems to maintain or attenuation processes to monitor. As a result, there is no Operations and Maintenance required for Area A (IT, 2001).

Statement of Action Complete

The remedial action completed at OU2 Landfill Area A meets the RAO established in the OU2 Landfills ROD (Army, 1994) and ESD (Army, 1996). There are no additional actions found to be necessary for soil at OU2 Area A.

The implemented remedy achieves the degree of cleanup or protection for OU2 Area A specified in the OU2 Landfills ROD and ESD for the deletion parcels and no further Superfund response is needed to protect human health and the environment.

Document References

- Dames & Moore (D&M), 1993a. *Final Remedial Investigation Report, Remedial Investigation/Feasibility Study, Fort Ord Landfills, Fort Ord, California*. June. AR# OU2-222
- D&M, 1993b. *Final Feasibility Study Report, Remedial Investigation/Feasibility Study, Fort Ord Landfills, Fort Ord, Monterey, California*. October. AR# OU2-251
- IT Corporation, 2001. *Draft Final Remedial Action Confirmation Report and Post-Remediation Screening Risk Assessment Area A, Operable Unit 2 Landfills, Former Fort Ord, California, Revision 0, April 2001*. April 30. AR# OU2-599A
- United States Army (Army), 1994. *Record of Decision Operable Unit 2, Fort Ord Landfills, Fort Ord, California*. July 15. AR# OU2-480
- Army, 1996. *Explanation of Significant Differences Area A, Operable Unit 2 Landfill, Fort Ord, California*. August 13. AR# OU2-458

Operable Unit Carbon Tetrachloride Plume (OUCTP) Soil Only

Site Background and History

OUCTP soil investigation is complete with no soil contamination identified and soil gas effectively implemented as part of the RI. The soil remediation unit is included in the partial deletion. Groundwater contamination at OUCTP remains on the NPL due to ongoing remedy. Analytical results for groundwater samples collected from three Army-owned water supply wells between 1985 and 1991 indicated a sporadic presence of carbon tetrachloride (CT). These wells became inactive between 1986 and 1991 (HLA, 1999), and were decommissioned in 1999. CT was also identified in groundwater at Fort Ord in 1992, but this was not associated with a particular site. To evaluate the extent of CT in groundwater, several monitoring wells were installed in 1998 as part of an initial investigation of CT, the results of which were presented in the Draft Final Carbon Tetrachloride Investigation Report (HLA, 1999). Subsequent investigation activities and studies of OUCTP were conducted as part of the OUCTP RI (MACTEC, 2006).

Historical practices (cleaning electronic equipment and radios) gleaned from personal interviews and the knowledge that CT was a very commonly-used solvent from the 1940s through the 1960s, indicated used CT was likely disposed of to the ground over a period of years at a former training facility in the vicinity of what is now Lexington Court, a residential area in the northern portion of the former Fort Ord. Activities associated with this facility, which is reported to have stored CT in five-gallon cans, presumably included the use and disposal of CT. No records exist to indicate exactly when, how often, or how much CT may have been used, stored, or disposed of; however, by delineating the areas of highest concentration in the groundwater and the soil vapor, the apparent CT disposal location was identified (MACTEC, 2006).

Concentrations of CT in soil vapor were generally low from the near surface down through the unsaturated dune sands. This vertical distribution suggested a residual mass, not a recent or continuing one. Groundwater immediately beneath the source area contained only very low concentrations of CT, which suggested an insufficient mass of CT remained in the vadose zone to significantly contribute to the A-Aquifer (MACTEC, 2006).

Only the OUCTP SRU is identified for partial deletion at this time. The parcel associated with OUCTP that is included in the partial deletion is E4.3.2.2. All other parcels associated with OUCTP did not require soils remediation and are also identified for partial deletion.

Remedial Investigation and Feasibility Study

The scope of the RI for OUCTP soils included:

- Defining the extent of surface and subsurface soil contamination.
- To confirm the presence of CT in the vadose zone and to determine whether sufficient CT mass remained in the vadose zone to constitute a residual source that might potentially continue to contaminate the A-Aquifer.
- An SVE pilot study to evaluate the potential to remove residual CT in the vadose zone soils and soil vapor.

The results of the RI indicated:

- No soil contamination was discovered during the study.
- Soil gas surveys were conducted in three phases (I, II, and III) to delineate the location of the soil gas plume. Phase I concluded that the distribution of CT concentrations is consistent both laterally and vertically and suggested increasing concentrations with

depth within a relatively small (5-acre) area. Phase II and Phase III sample results confirmed the presence of CT, chloroform, PCE, and TCE in the vicinity of Lexington and Ready Courts at all depths, with concentrations increasing linearly with increasing depth.

- The SVE pilot study was successful in removing the source of carbon tetrachloride (Shaw, 2006).

The FS only addressed groundwater contamination because no soil contamination was discovered during the RI, and the pilot SVE removed CT from the soil gas at the source area (MACTEC, 2006).

Selected Remedy

The OUCTP ROD was finalized in 2008. No remedy for OUCTP soil was outlined in the ROD because an SVE pilot study had been performed to evaluate remediation of vadose zone soils in the OUCTP source area (April – November 2004), and soil samples collected during the RI showed no soil contamination. The OUCTP ROD identified the groundwater remedies as enhanced in situ bioremediation (EISB) and monitored natural attenuation (MNA) in the A-Aquifer, hydraulic control and containment of contaminated groundwater through extraction and treatment of groundwater exceeding ACLs in the Upper 180-Foot Aquifer, and MNA in the Lower 180-Foot Aquifer. The remedial action objective (RAO) for groundwater at OUCTP is to remediate COCs in the A-Aquifer, Upper 180-Foot Aquifer, and Lower 180-Foot Aquifer to Federal or California drinking water MCLs or lower for some COCs.

Response Actions

The SVE pilot study was implemented as part of the RI because analytical results from soil gas and groundwater samples collected in the vicinity of Lexington Court and Ready Court suggested a source of CT was present in the vadose zone soils in this area (MACTEC, 2004). These previous investigations showed that soil gas concentrations were higher in proximity to the water table than at shallow depths.

The SVE pilot study also provided source control for the CT groundwater plume and reduced or minimized the potential for vapor intrusion into the nearby housing area. System operation started on April 4, 2004 and ended on November 8, 2004. During SVE system operation, 0.78 pounds of CT was removed from the vadose zone. CT soil gas data collected six months after the SVE system was shut down showed only low levels (an average of 0.06 parts per billion by volume [ppbv]) of CT concentrations. This indicated the CT source had been removed; therefore, no additional cleanup activity was recommended for soil gas in the vicinity of Lexington Court (Shaw, 2006).

Groundwater remediation efforts began in 2007 with a pilot deployment of EISB in a downgradient area of the A-Aquifer near the boundary between the former Fort Ord and the City of Marina. This was followed by six additional EISB deployments in different parts of OUCTP in the A-Aquifer in 2009 (Deployment Area 1A), 2010 (Deployment Areas 1B and 1C), 2011 (Deployment Areas 2A and 2B), and 2016 (Deployment Area 3A). MNA for the Lower 180-Foot Aquifer was initiated in 2008, and hydraulic control and containment of contaminated groundwater through extraction and treatment of groundwater in the Upper 180-Foot Aquifer was initiated in 2011 with construction of an extraction well that was connected to the OU2 groundwater treatment plant. In a letter dated September 3, 2013, the USEPA concurred with the Army's determination that the OUCTP remedies are "operating properly and successfully" and provided a remedy construction complete determination (USEPA, 2011 and 2013).

Cleanup Levels

No cleanup levels for OUCTP soil and soil gas were defined in the OUCTP ROD because soil samples collected during the RI showed no soil contamination and the SVE pilot study was effective in removing VOCs, specifically CT, from the soil gas and provided source control for the CT groundwater plume.

ACLs for groundwater at OUCTP are defined in the OUCTP ROD (Army, 2008). Analytical data indicate progress toward RAOs for groundwater at OUCTP, but RAOs have not been met.

Operations and Maintenance

There are no treatment systems O&M activities are currently required at OUCTP for soils. Since the objectives of the pilot study were achieved, the pilot treatment system was demobilized from the site in November 2004. The last sampling event conducted in April 2008 showed that the objectives have been achieved (Shaw, 2010).

The OUCTP area is located within the Prohibition Zone of the Special Groundwater Protection Zone established by Monterey County. In accordance with Monterey County Code Title 15, Chapter 15.08.140, construction of any proposed well in the Prohibition Zone is restricted and will not be permitted by the Monterey County Health Department (other than wells installed by the Army for remediation purposes).

Determination that the Criteria for Deletion have been Met

The OUCTP ROD concluded the SVE pilot study successfully removed the CT source; therefore, no additional remedial activity is required for soil or soil vapor formerly associated with OUCTP (Shaw, 2010).

Document References

- California Environmental Protection Agency (CalEPA), 2005. *Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties: Table 2.*
- Harding Lawson Associates (HLA), 1999. *Draft Final Carbon Tetrachloride Investigation Report, Fort Ord, California.* November 10. AR# BW-1997U
- MACTEC Engineering and Consulting Inc. (MACTEC), 2004. *OUCTP SVE Pilot Study Test Letter Report.* January.
- MACTEC, 2006. *Final Operable Unit Carbon Tetrachloride Plume Groundwater Remedial Investigation/Feasibility Study, Former Fort Ord, California, Volume I – Remedial Investigation; Volume II – Human Health Risk Assessment; Volume III – Feasibility Study.* May. AR# OUCTP-0011P
- Shaw Environmental, Inc. (Shaw), 2004a. *Final Work Plan and Sampling and Analysis Plan, Pilot Soil Vapor Extraction and Treatment, Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California. Revision 0.* AR# OUCTP-0007
- Shaw, 2004b. *Draft Final Report, March 2004 Indoor Air Sampling, Lexington Court, Former Fort Ord, California. Revision 0.* September 30. AR# OUCTP-0008K
- Shaw, 2006. *Draft Final Evaluation Report Pilot Soil Vapor Extraction and Treatment Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California, Revision 0.* May. AR# OUCTP-0013C
- Shaw, 2010. *Final Interim Remedial Action Completion Report, Operable Unit Carbon Tetrachloride Plume, Former Fort Ord, California, Revision 0.* April. AR# OUCTP-0040E
- U.S. Department of the Army (Army), 2008. *Record of Decision Operable Unit Carbon Tetrachloride Plume, Former Fort Ord California.* February 6. AR# OUCTP-0021D

- U.S. Environmental Protection Agency (USEPA), 2011. *EPA finds that the Army has provided sufficient information to confirm that Monitored Natural Attenuation (MNA) is working as per the guidelines listed in the Record of Decision. EPA concurs that MNA in the Lower 180-Foot Aquifer portion of the OUCTP groundwater plume is Operating Properly and Successfully.* October 20. AR# OUCTP-0050A
- USEPA, 2013. *EPA Determination of Operating Properly and Successfully/Construction Completion, Operable Unit Carbon Tetrachloride Plume.* September 3. AR# OUCTP-0060.1

5. Site-Specific Information: MMRP Sites

Information on MMRP sites that are identified for partial deletion is provided below. Reference documents specific to the site summaries are listed at the end of each subsection.

Please note that Figure 1 shows current configurations of major roads in the Fort Ord vicinity. As reuse progressed, road names and alignments have been adjusted. Site summaries may refer to road names that existed at the time of investigation. For detailed locations of sites and features, please refer to the documents referenced in the site summaries.

The Army's MMRP addresses explosives safety hazards associated with MEC. Definitions of MMRP terms are provided in Defense Explosives Safety Regulation (DESR) 6055.09, Edition 1, January 13, 2019. Key terms are listed below.

Munitions and explosives of concern (MEC). A term distinguishing specific categories of military munitions that may pose unique explosives safety risks:

Unexploded ordnance (UXO), as defined in section 101(e)(5) of Title 10, U.S.C.;

Discarded military munitions (DMM), as defined in section 2710(e)(2) of Title 10, U.S.C.; or

Munitions constituent (e.g., TNT, cyclotrimethylenetrinitramine (RDX)), as defined in section 2710(e)(3) of Title 10, U.S.C., present in high enough concentrations to pose an explosive hazard.

Unexploded ordnance (UXO). Defined in section 101(e)(5) of Title 10, U.S.C. The term "unexploded ordnance" means military munitions that— (A) have been primed, fused, armed, or otherwise prepared for action; (B) have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (C) remain unexploded, whether by malfunction, design, or any other cause.

Discarded military munitions (DMM). Defined in section 2710(e)(2) of Title 10, U.S.C. The term "discarded military munitions" means military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal. The term does not include unexploded ordnance, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of, consistent with applicable environmental laws and regulations.

Munitions constituent (MC). Defined in section 2710(e)(3) of Title 10, U.S.C. The term "munitions constituents" means any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions debris (MD). Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization, or disposal.

Following the decision to close Fort Ord, the Army began conducting munitions responses (e.g., investigation, removal) at identified MRSs. The basewide Munitions Response RI/FS program was initiated in 1998. It reviewed and evaluated past munitions responses and recommended future response actions necessary to protect human health and the environment from the potential explosives safety risks posed by MEC that may be present based on the property's proposed reuses. The Fort Ord Reuse Plan (FORA, 1997) and its updates identify the proposed reuses.

The basewide Munitions Response RI/FS program was organized as a “tracking” process whereby sites with similar characteristics are grouped to expedite cleanup, reuse, and/or property transfer. A site or area was assigned to a specific “track” (i.e., Track 0, 1, 2, or 3) according to the level of military munitions usage, and munitions responses (e.g., investigation, removal) conducted, as described in *Draft Final Ordnance and Explosives Remedial Investigation/Feasibility Study Work Plan, Former Fort Ord, California* (OE RI/FS Work Plan; USACE, 2000).

- Track 0 areas at the former Fort Ord are not suspected of having been used for military munitions-related activities and there is no evidence to indicate the presence of MEC.
- Track 1 sites were suspected to have been used for military munitions-related activities (i.e., training), but based on the results of a remedial investigation, no further action is required.
- Track 2 sites are areas where MEC have been encountered and a removal has been conducted.
- Track 3 sites are areas: (a) where MEC is known or suspected to exist, but investigations are either not yet completed or need to be initiated; or (b) that may be identified in the future as a Track 3 site.

Tracks 0, 1 and 2 are described below as they relate to the deletion parcels. Additionally, FORA conducted munitions responses under the ESCA and the AOC; the ESCA areas were grouped into several MRAs and addressed in several RODs described below. To date, all of the former Fort Ord properties have been evaluated for the potential for munitions hazards. The status of the MMRP is displayed on Figure 4.

There are parcels that were transferred prior to the initiation of the Munitions Response RI/FS program in 1998. These parcels were evaluated as part of the CERFA, EBS, and FOST processes. The primary objective of CERFA is for federal agencies to expeditiously identify real property offering the greatest opportunity for immediate reuse and redevelopment. Several parcels were identified as having no evidence of current or past storage, release, or disposal of hazardous substances or petroleum products or their derivatives, and for which there is no evidence of the presence of other environmental, hazard, or safety concerns. Parcels with no evidence of hazardous substances but required evaluation for potential for the presence of UXO were identified as CERFA Qualified. The parcels were further evaluated in the EBS/FOST processes and transferred after receiving EPA concurrence for transfer under CERCLA Section 120(h)(4) or 120(h)(3). Parcel-specific information is provided in Table 2.

Track 0 ROD and approval memoranda (No Action)

Site Background

In 2002, the Army published *Final Record of Decision No Action Regarding Ordnance-Related Investigation, Former Fort Ord, California (Track 0)* (Track 0 ROD; Army, 2002). The Track 0 ROD addresses areas at the former Fort Ord that contain no evidence of MEC and have never been suspected as having been used for military munitions-related activities of any kind based on then-current knowledge, as outlined in *Draft Final Literature Review Report, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California* (HLA, 2000) and investigated under the basewide MR RI/FS Program at former Fort Ord.

The Track 0 ROD addresses designated land parcels, and also provides a plug-in process to address subsequently identified land parcels (areas that are similar to those already approved in the Track 0 ROD) that are considered eligible for inclusion in the Track 0 process. The Track 0 “Plug-In” process requires that No Action decisions for these future Track 0 areas be documented in Approval Memoranda.

Remedial Investigation and Feasibility Study

The 129 Track 0 areas listed in the Track 0 ROD consist largely of land that has been developed for military support or residential use throughout Fort Ord’s history and areas that have no physical or documented evidence of military munitions-related training.

The Track 0 process addresses single or grouped areas of land at the former Fort Ord that have no history of ordnance-related use and for which No Action is needed to protect human health and the environment.

The decision for entering areas into the Track 0 process was based on the results of the literature review, documents referenced therein, and information obtained from site-specific activities and other activities where available. The main sources of information relied upon in evaluating an area's eligibility for Track 0 status included the following:

- The Literature Review Report (HLA, 2000a)
- The Revised Archives Search Report (ASR) (USAEDH, 1997b)
- The Community Environmental Response Facilitation Act (CERFA) Report (Little, 1994)
- The Basewide RI/FS (HLA, 1995)

The literature review process included gathering and reviewing files from multiple sources. Previous investigations at the former Fort Ord that documented munitions-related activities were reviewed along with historical records. Historical records reviewed included range control files, historical maps, aerial photographs, historical film footage, real estate records and newspaper articles. Interviews were conducted with retired military personnel, active enlisted and civilian personnel that served at the former Fort Ord, and others. Other factors considered included physical location of an area, development history, and the results of the remedial investigation and excavation activities at IRP sites.

The Archives Search investigation involved extensive record search of the former Fort Ord related to ordnance documentation and a visual inspection of ordnance sites identified. Records reviewed included aerial photographs, National Archives records, and Fort Ord fire department records. The Archives Search also included interviews with current and former employees.

The CERFA investigation included a search of government records, a review of aerial photographs reflecting prior uses, a visual inspection of the former Fort Ord, physical inspection

of and review of information for adjacent properties and interviews with current and former employees.

The Basewide RI/FS included a review of previous investigations at the former Fort Ord and extensive field investigation activities at several of the Track 0 areas. RI/FS documentation was reviewed and utilized in the delineation of the Track 0 areas. A checklist was developed to highlight the main sources of information used in evaluating each of the areas for Track 0 status.

Track 0 Technical Memorandum, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California (HLA, 2000b) provided the area- or parcel-specific rationale for assigning areas to Track 0 and served as a basis for the Track 0 Proposed Plan.

Selected Remedy and Decision Documents

Because there are no current or potential future risks to human health and the environment posed by MEC at Track 0 areas, no remedial action is necessary in these areas.

The proposed remedy was presented to the community in *Superfund Proposed Plan: No Action is Proposed for Selected Areas at Fort Ord, California* (Army, 2000). A 30-day public comment period began February 4, 2000, and was extended to 60 days at the request of the public, closing on April 4, 2000. The Army also held a public meeting on February 16, 2000. The public comments were considered prior to remedy selection.

No remedial action is necessary in Track 0 areas to meet the objectives of unrestricted use. In the future, should any ordnance-related item be found within any of the areas addressed in the Track 0 ROD, the Army will take appropriate action immediately and, within 90 days of the discovery, will submit a plan for appropriate follow-on action to EPA and DTSC for consultation.

In addition, a "Plug-In" process can be used for documenting No Action determinations for other areas that meet the Track 0 criteria based on requirements described in the Track 0 ROD.

Explanation of Significant Differences Final Record of Decision No Action Regarding Ordnance-Related Investigation (Track 0 ROD), Former Fort Ord, California (Track 0 ESD; Army, 2005a) was prepared to clarify the scope of the Track 0 Plug-In process and the types of areas that the Track 0 ROD intended to make eligible for consideration for No Action under the Track 0 "Plug-In" process. The specific circumstances discussed in the Track 0 ESD are areas where incidental military munitions are found, special case areas where military munitions are found in a disposal area and are fully excavated, and areas where no live firing occurred.

Response Actions

The selected remedy was No Action, which allows for unrestricted reuse.

Additional areas identified as Track 0 were documented as such through the Track 0 Plug-In process. Four separate Approval Memoranda, which are listed below, were prepared to include 45 new areas as Track 0 areas.

- *Track 0 Approval Memorandum, East Garrison Area 1, Former Fort Ord, Monterey, California* (Army, 2003).
- *Track 0 Plug-In Approval Memorandum, Selected Parcels – Group B, Former Fort Ord, California* (Army, 2005b).
- *Track 0 Plug-In Approval Memorandum, Selected Parcels – Group C, Former Fort Ord, California* (Army, 2005c).

- *Track 0 Plug-In Approval Memorandum, Selected Parcels – Group D, Former Fort Ord, California* (Army, 2006).

Cleanup Levels

No action is required for Track 0 areas.

Operations and Maintenance

No operations or maintenance are necessary for the selected remedy.

Statement of Action Complete

The areas addressed under the Track 0 ROD at the former Fort Ord contain no evidence of MEC and have never been suspected as having been used for military munitions-related activities of any kind. The Track 0 areas meet the unlimited use/unrestricted exposure criteria. No action for munitions response is appropriate.

Document References

- Harding Lawson Associates, 1995. *Final Basewide Remedial Investigation/Feasibility Study, Fort Ord, California*. October. AR# BW-1283A
- Harding Lawson Associates, 2000a. *Draft Final Literature Review Report, Ordnance and Explosives, Remedial Investigation/Feasibility Study, Former Fort Ord, California*. January 4. AR# OE-0245H
- Harding Lawson Associates, 2000b. *Track 0 Technical Memorandum, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California*. January 21. AR# OE-0258F
- Little, A.D., 1994. *Community Environmental Response Facilitation Act (CERFA) Report, Fort Ord, Monterey, California*. April. AR# BW-1658
- U.S. Army Engineer Division, Huntsville (USAEDH), 1997. *Revised Archives Search Report, Former Fort Ord, California, Monterey County, California*. Prepared by U.S. Army Corps of Engineers St. Louis District. AR# OE-0022
- Army, 2000. *Superfund Proposed Plan: No Action is Proposed for Selected Areas at Fort Ord, California*. February 1. AR# OE-0267
- Army, 2002. *Final Record of Decision No Action Regarding Ordnance-Related Investigation, Former Fort Ord, California (Track 0)*. June 19. AR# OE-0406
- Army, 2003. *Track 0 Approval Memorandum East Garrison Area 1, Former Fort Ord, Monterey, California*. December 1. AR# OE-0472
- Army, 2005a. *Explanation of Significant Differences Final Record of Decision No Action Regarding Ordnance-Related Investigation (Track 0 ROD), Former Fort Ord, California*. April 26. AR# OE-0406D
- Army, 2005b. *Track 0 Plug-in Approval Memorandum, Selected Parcels - Group B, Former Fort Ord, California*. May 27. AR# OE-0525F
- Army, 2005c. *Track 0 Plug-In Approval Memorandum Selected Parcels - Group C, Former Fort Ord, California*. July 1. AR# OE-0527C
- Army, 2006. *Track 0 Plug-in Approval Memorandum Selected Parcels - Group D, Former Fort Ord, California*. May 5. AR# OE-0587

Track 1 ROD and approval memoranda (NFA)

Site Background

Record of Decision, No Further Action Related to Munitions and Explosives of Concern – Track 1 Sites, No Further Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22), Former Fort Ord, California (Track 1 ROD; Army, 2005a) was signed in April 2005. The Track 1 ROD is based on *Final Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California* (Track 1 OE RI/FS Report; MACTEC, 2004). The Track 1 ROD addresses 21 Track 1 MRSs that were suspected to have been used for training with military munitions, but no further response action is required based on remedial investigation.

The Track 1 ROD defines the criteria that additional sites must meet to qualify as NFA sites and describes the approval process. Track 1 NFA sites at Fort Ord are categorized into one of the following three categories:

- Category 1 Sites: There is no evidence to indicate military munitions were used at the site, i.e., suspected training did not occur; or
- Category 2 Sites: The site was used for training, but the military munitions items used do not pose an explosive hazard, i.e., training did not involve explosive items; or
- Category 3 Sites: The site was used for training with military munitions, but military munitions items that potentially remain as a result of that training do not pose an unacceptable risk based on site-specific evaluations conducted in the Track 1 OE RI/FS Report. For this category of sites, field investigations identified evidence of past training involving military munitions, but the training at these sites involved only the use of practice and/or pyrotechnic items that are not designed to cause injury. In the unlikely event that a live item of the type previously observed at the site is found, it is not expected that the item would function by casual contact (i.e., inadvertent and unintentional contact).

For the purposes of the Track 1 ROD and the basewide MMRP at the former Fort Ord, MEC does not include small arms ammunition (.50 caliber and below).

Remedial Investigation and Feasibility Study

The 21 sites were identified for evaluation in the Track 1 OE RI/FS Report based on the literature review and an evaluation of data collected during one or more site visits incorporating visual and geophysical inspections during reconnaissance, sampling, or site walks.

To be included in the Track 1 decision process, the results of the evaluation performed for a site must indicate a strong weight of evidence that the information from the literature review and field investigations supports NFA as determined by the project team (i.e., MR BCT). Site-specific evaluations of archival data (literature review) and field-based investigation data (field reconnaissance, sampling, and site walks) were conducted for each of the 24 candidate Track 1 sites to determine whether sufficient data was available to conclude that NFA related to munitions response was required. Information evaluated for each site included the adequacy of the reconnaissance, sampling, or site walk conducted, the performance of the geophysical equipment used during investigation, data management, and the appropriateness of the site boundaries. Each site report was prepared as a stand-alone RI report addressing: site description; site history and development; potential military munitions based on historical use of the site; history of military munitions investigations; conceptual site model; site evaluation; conclusions and recommendations; and references. For 21 of the 24 candidate sites evaluated

in the Track 1 OE RI/FS Report (MACTEC, 2004), the project team determined the results of the evaluations performed indicated a strong weight of evidence that the information support NFA related to munitions response.

Selected Remedy and Decision Documents

The NFA alternative was presented in *Superfund Proposed Plan, No Further Action is Proposed for Track 1 Sites at Former Fort Ord, California* (Army, 2004). A 30-day public comment period began September 15, 2004, and was extended to 60 days at the request of the public, closing on November 15, 2004. The Army also held a public meeting on September 29, 2004. The public comments were considered prior to remedy selection.

The Track 1 ROD addresses identified potential munitions sites that contain no actionable risks; therefore, no remedial action is necessary for the Track 1 sites. The selected remedy for the Track 1 sites is NFA, which allows for unrestricted reuse.

Even though no actionable risk was identified through the RI process, in the interest of safety, reasonable and prudent precautions should be taken when conducting intrusive operations at the Track 1 sites. The Army recommended that construction personnel involved in intrusive operations at specific MRSs attend the munitions recognition and safety training provided by the Army.

During the five-year review process, the Army will assess whether the education program should continue. If information indicates that no MEC items have been found in the course of development or redevelopment of the site, it is expected that the education program may, with the concurrence of the regulatory agencies, be discontinued, subject to reinstatement if a MEC item is encountered in the future. In the future, should any munitions-related item be reported within any of the areas addressed in the Track 1 ROD, the Army will take appropriate action and submit a plan for appropriate follow-on action to EPA and DTSC within 90 days of the discovery.

In addition, a "Plug-In" process can be used for documenting NFA determinations for areas not included in the original Track 1 ROD that meet the Track 1 criteria based on the ongoing MR RI/FS program.

The Track 1 ROD also documents the final remedy for Site 3 (co-located with MRS-22) regarding ecological risks. Remediation of contaminated soil in former small arms ranges had taken place based on an interim ROD. Because Site 3 (MRS-22) does not appear to pose and unacceptable risk to the environment (ecological receptors) from metals in soil, no further remedial action with monitoring will be conducted at Site 3 to confirm the results of the ecological risk assessments and evaluations conducted. The results of the monitoring and completion of this remedial action are described in Section 4 of this report.

Response Actions

The 21 Track 1 sites approved for NFA in the Track 1 ROD are listed below;

- MRS-1 - Flame Thrower Range
- MRS-5 - South of East Garrison
- MRS-6 - Mine and Booby Trap Training Area
- MRS-13A - Practice Mortar Range
- MRS-20 - Recoilless Rifle Training Range
- MRS-22 (Site 3) - Beach Trainfire Ranges
- MRS-24B - Practice Hand Grenade Range
- MRS-24D - Booby Traps

- MRS-24E - Practice Rifle Grenade Range
- MRS-27X - Training Site 24
- MRS-27Y - Training Site 25
- MRS-32A - Oil Well Road Training Area
- MRS-32B - Oil Well Road Training Area II
- MRS-39 - Mine and Booby Trap Area
- MRS-49 - Former Rifle Grenade Range
- MRS-59A - Unnamed
- MRS-62 - Laguna Seca Open Space
- MRS-63 - Canyon Training Area
- MRS-66 - Signal Corps Small Arms
- MRS-69 - Unnamed
- MRS-70 - Unnamed

The following Track 1 Plug-In Approval Memoranda were finalized between 2002 and 2019:

- *Track 1 Plug-In Approval Memorandum, MRS-6 Expansion Area, Former Fort Ord, California (Army, 2005b).*
- *Track 1 Plug-In Approval Memorandum, East Garrison Areas 2 and 4 NE, Former Fort Ord, California (Army, 2006a).*
- *Track 1 Plug-In Approval Memorandum, Multiple Sites, Groups 1 – 5, Former Fort Ord, California (Army, 2006b).*
- *Track 1 Plug-In Approval Memorandum, County North Munitions Response Area, Former Fort Ord, California (Army, 2010).*
- *Track 1 Plug-in Approval Memorandum, BLM-Headquarters and MRS-35, Former Fort Ord, California (Army, 2011a).*
- *Track 1 Plug-in Approval Memorandum, MRS-24A, MRS-24C, and Parcel E20c.1, Former Fort Ord, California (Army, 2011b).*
- *Track 1 Plug-in Approval Memorandum BLM Area A, Former Fort Ord, California (Army, 2012).*
- *Track 1 Plug-in Approval Memorandum BLM Area C, Former Fort Ord, California (Army, 2018).*

Of the approved Track 1 areas, two areas are not included in the partial deletion. They are portions of BLM Area A and BM Area C occupying portions of Parcel F1.1.1 (5,256 acres) and Parcel F1.2 (464 acres). These two parcels also contain portions of a Track 2 site called BLM Area B, for which completion of RAs has not been approved. The two parcels are designated habitat reserve and were transferred to BLM in 1996.

Cleanup Levels

No further action regarding munitions response is required for Track 1 sites.

Operations and Maintenance

No operations or maintenance are necessary for the selected remedy.

The MRS Security Program for the former Fort Ord includes the Army's recommendation for the munitions recognition and safety training program (Army, 2016). Notices regarding the Army's recommendation for munitions recognition and safety training were included in property transfer documents for parcels containing Track 1 MRSs. For properties that had been transferred at the time the Track 1 ROD was signed, owners of those properties were notified about the training program in August 2005.

Statement of Action Complete

The NFA remedy allows for unrestricted use. The Army will continue to offer the munitions recognition and safety training to construction personnel involved in intrusive operations at Track 1 sites. The Army also maintains a program to collect information, and report to the regulatory agencies, about any munitions-related items found within the Track 1 sites. No further action for munitions response is appropriate.

Document References

- MACTEC, 2004. *Final Track 1 Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California*. June 21. AR# OE-0421M
- Army, 2004. *Superfund Proposed Plan, No Further Action is Proposed for Track 1 Sites at Former Fort Ord, California*. September 1. AR# OE-0507
- Army, 2005a. *Record of Decision: No further Action Related to Munitions and Explosives of Concern - Track 1 Sites/ No Remedial Action with Monitoring for Ecological Risks from Chemical Contamination at Site 3 (MRS-22), Former Fort Ord, California*. March 10. AR# OE-0526
- Army, 2005b. *Track 1 Plug-in Approval Memorandum MRS-6 Expansion Area, Former Fort Ord, Monterey, California*. May 6. AR# OE-0529
- Army, 2006a. *Track 1 Plug-in Approval Memorandum East Garrison Areas 2 and 4 NE, Former Fort Ord, Monterey, California*. March 23. AR# OE-0559A
- Army, 2006b. *Track 1 Plug-in Approval Memorandum Multiple Sites, Groups 1 - 5, Former Fort Ord, California*. July 19. AR# OE-0591H
- Army, 2010. *Final Track 1 Plug-in Approval Memorandum, County North Munitions Response Area, Former Fort Ord, California*. February 16. AR# ESCA-0169A
- Army, 2011a. *Track 1 Plug-in Approval Memorandum BLM-Headquarters and MRS-35, Former Fort Ord, California*. March 24. AR# OE-0740
- Army, 2011b. *Track 1 Plug-in Approval Memorandum MRS-24A, MRS-24C, and Parcel E20c.1, Former Fort Ord, California*. September 30. AR# OE-0741A
- Army, 2012. *Track 1 Plug-In Approval Memorandum BLM Area A, Former Fort Ord, California*. August 21. AR# OE-0780
- Army, 2016. *Munitions Response Site Security Program, Former Fort Ord, California*. March. AR# OE-0422P
- Army, 2018. *Track 1 Plug-In Approval Memorandum, Bureau of Land Management Area C, Former Fort Ord, California*. October 31. AR# OE-0939

Track 2 ROD Parker Flats MRA

Site Background

Record of Decision, Parker Flats Munitions Response Area Track 2 Munitions Response Site, Former Fort Ord, California (Track 2 Parker Flats ROD; Army, 2008), was signed on August 26, 2008. The Parker Flats MRA is approximately 758 acres in size and is located in the central part of the former Fort Ord between the former Fort Ord Main Garrison and the historical Impact Area.

Munitions and explosives of concern removal actions had been completed at the Parker Flats MRA prior to the development of *Final Track 2 Munitions Response Remedial Investigation/Feasibility Study, Parker Flats Munitions Response Area, Former Fort Ord, California* (Track 2 Parker Flats RI/FS; MACTEC, 2006) and the Track 2 Parker Flats ROD. The selected remedy is LUCs.

Remedial Investigation and Feasibility Study

The Parker Flats MRA includes all or portions of 13 MRSs (MRS-3, MRS- 04B, MRS- 13B, MRS-27A, MRS-27B, MRS-27G, MRS-37, MRS-40, MRS-50/50EXP, MRS-52, MRS-53/53EXP, MRS-54EDC, and MRS-55 [including portions of MRS-27A and MRS-27B]), many of which were used for live-fire training (e.g., artillery, mortar) and other training that may have included the use of military munitions. The northern portion of the Parker Flats MRA consists entirely of MRS-13B (Practice Mortar Range), and is separated from the southern portion of the Parker Flats MRA. The southern portion of the Parker Flats MRA includes the remaining MRSs. The 13 MRSs were investigated and MEC removals were completed by the Army's munitions response contractors. The sampling and removal actions were designed to address MEC to depths of four feet bgs; however, all anomalies, even those deeper than four feet bgs, were investigated and resolved, and all detected MEC was removed within the Parker Flats MRA.

The removal actions significantly reduced the risks to human health and the environment. Because detection technologies may not have detected all MEC present and some areas contained barriers (e.g., pavement, buildings) that, while providing protection against MEC potentially present, precluded the use of detection technologies, a future user could encounter MEC. This risk was evaluated as part of the Track 2 Parker Flats RI/FS (MACTEC, 2006).

As part of the RI, the available data (e.g., archival and MEC removal data) regarding the Parker Flats MRA were reviewed and evaluated according to procedures described in *Final Plan for Evaluation of Previous Work, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California* (HLA, 2000b). The evaluation process was documented by completion of a series of checklists.

The project team developed *Fort Ord Ordnance and Explosives Risk Assessment Protocol* (Malcom Pirnie, 2002) to qualitatively estimate the potential explosives safety risks posed by MEC at MRSs at the former Fort Ord. Based on three key factors (MEC Hazard Type, Accessibility, Exposure), "Overall MEC Risk Score" was developed for each area for multiple anticipated receptors that the team assumed would use these areas. The results are described in letters A (lowest) through E (highest). In general, the results of the risk assessment for the Parker Flats MRA indicated that the completed MEC investigation and removal actions decreased the risks for the majority of the receptors evaluated. For the majority of the potential receptors (e.g., trespassers, recreational users, indoor workers, public facility visitors), the Overall MEC Risk Score were estimated to be low (B) or the lowest (A). For the remaining receptors (e.g., construction workers, outdoor maintenance workers, habitat workers) who

conduct ground-disturbing or intrusive activities, Overall MEC Risk Scores were estimated as high (D) or highest (E).

The qualitative Overall MEC Risk Scores were used in the FS to guide the development and evaluation of response alternatives for the Parker Flats MRA during development and for reasonably anticipated future uses.

Under the *Fort Ord Base Reuse Plan* (FORA, 1997), the anticipated future uses of the property included: a veterans' cemetery; an emergency vehicle operations center for Monterey Peninsula College (MPC); habitat reserve; maintenance center for Monterey-Salinas Transit (MST); a park-and-ride; a public facility for Monterey County; an Army maintenance center; and development reserve that could include residential development.

To manage the risk to future land users from MEC that potentially remain in the property, the Army evaluated the following three remedial alternatives for the Parker Flats MRA reuse areas:

- Alternative 1: No Further Action
- Alternative 2: Land Use Controls
- Alternative 3: Additional MEC Remediation.

Subsurface MEC removal was previously conducted in the Parker Flats MRA. The LUCs include munitions recognition and safety training for workers that conduct ground-disturbing or intrusive activities; and construction monitoring for ground-disturbing or intrusive activities to address the possibility that MEC remains in the subsurface. Alternative 2 was identified as the preferred alternative because it would be protective of human health and the environment for future land users, and would be effective in the short-term and long-term at mitigating the risk to workers conducting ground-disturbing or intrusive activities from MEC that is potentially present; would require a moderate level of effort to implement; and would have a comparatively low cost associated with its implementation (MACTEC, 2006).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan, Remedial Action is Proposed for Parker Flats Munitions Response Area, Track 2 Munitions Response Remedial Investigation/Feasibility Study, Former Fort Ord, California* (Army, 2007). A 30-day public comment period was held between February 15 and March 17, 2007. The Army also held a public meeting on March 1, 2007. The public comments were considered prior to remedy selection.

The selected remedy for the Track 2 Parker Flats MRA is LUCs.

The LUCs include:

- (1) Munitions recognition and safety training for workers that will conduct ground disturbing or intrusive activities;
- (2) Construction monitoring during ground disturbing or intrusive activities; and
- (3) Restrictions against residential use.

Based on the RI/FS, the Army's position was that the additional layer of protection in a form of residential use restriction was not necessary for the Parker Flats MRA; however, in consideration of regulatory input, the selected remedy included a LUC prohibiting residential use. For the purpose of the Parker Flats MRA ROD, residential use includes, but not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living

facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12. Any proposal for residential development in the Parker Flats MRA will be subject to regulatory review. Per the Fort Ord Base Reuse Plan (FORA, 1997), only the Development Reserve Reuse Area could include residential development as a potential future use.

The Track 2 Parker Flats ROD also provided that, while the Army did not consider California laws and regulations concerning Land Use Covenants to be potential ARARs, after the Parker Flats MRA ROD was signed, the Army would enter into State Land Use Covenants (i.e., covenants to restrict the use of property [CRUPs]) that document the land use restrictions selected as part of the remedy. Although the DTSC and EPA Region IX disagreed with the Army's determination that California laws and regulations concerning Land Use Covenants were not potential ARARs, they agreed to disagree on this issue if the Army would sign State Land Use Covenants acceptable to DTSC. It should be noted that the majority of the Track 2 Parker Flats MRA parcels were subsequently transferred to FORA in 2009 as part of the ESCA, and the Army entered into State CRUPs at the time the property was transferred. After the completion of the implementation of the remedy, DTSC modified the CRUPs to make them consistent with the selected remedy. Following this CRUP modification process it became unnecessary for the Army to continue to participate the CRUP process. The remedial land use restrictions are recorded in deeds to the property.

The LUCs will be maintained until EPA and DTSC concur that the land use may be conducted in a manner protective of human health and the environment without the LUCs. This concurrence may be based on: (1) New information (e.g. limited geophysical mapping, site development); or (2) Where the depth of soil disturbance related to ground disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and any MEC encountered during such activities is removed.

In addition, long-term management measures comprising a federal deed restriction, CRUPs, annual monitoring and reporting, and five-year review reporting are being implemented, or will be implemented upon completion of the land transfer process for two parcels remaining to be transferred (Parcels L2.3 and L2.4.1).

The primary remedial action objectives for the Track 2 Parker Flats MRA reuse areas, based on EPA RI/FS Guidance, are to achieve the EPA's threshold criteria of "Overall Protection of Human Health and the Environment" and "Compliance with ARARs."

The residential use restriction was subsequently removed from the Development Reserve Reuse Area as described in *Explanation of Significant Differences No. 1, Record of Decision, Parker Flats Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California* (ESD; Army, 2018). As part of the FORA's ESCA Remediation Program, FORA conducted an additional evaluation of the designated future residential reuse areas within the ESCA Parker Flats properties to support removal of the residential use restriction component of the LUC remedy. *Final Residential Protocol Implementation Technical Report, Parker Flats Munitions Response Area, Former Fort Ord, Monterey County, California* (ESCA RP Team, 2017) presented the results of the residential quality assurance activities and provided additional documentation to support modifying the existing DTSC CRUPs to remove the residential use restrictions from the designated future residential use portions of the Parker Flats MRA Phase I. The ESD modified the LUC component of the remedy by removing the residential use restriction in the approximately 36 acres that make up the Development Reserve Reuse Area.

Response Actions

The majority of the Track 2 Parker Flats MRA was included in the ESCA program. (FORA classifies this area of the Parker Flats MRA as "Phase I.") The Army implements the selected remedy in the remainder of the MRA (Parcels F2.6, L2.4.1, and L2.3.) The Army prepared *Final Remedial Design/Remedial Action Work Plan, Parker Flats Munitions Response Area, Former Fort Ord, California, Revision 1* (MACTEC/Shaw, 2009) for the implementation of the LUCs for these parcels.

Parcels E19a.5 and L32.1 and portions of Parcels E18.1.1, E18.1.2, E19a.1, E19a.3, and E19a.4 were transferred by the Army to FORA in May 2009 as part of the ESCA (the ESCA Parker Flats MRA Phase I). FORA prepared *Final Remedial Design/Remedial Action, Land Use Controls Implementation, and Operation and Maintenance Plan, Parker Flats Munitions Response Area Phase I, Former Fort Ord, Monterey County, California* (RD/RA LUCI O&M Plan; ESCA RP Team, 2009) for the implementation of the of the selected remedy (LUCs) for these parcels.

Based on the two LUC implementation plans, in a letter dated July 27, 2009 EPA determined that all remedial actions have been implemented and completed at the Track 2 Parker Flats MRA (EPA, 2009).

The residential use restriction in the approximately 36 acres that make up the Development Reserve Reuse Area was removed by the 2018 ESD after Residential Quality Assurance work was implemented.

Cleanup Levels

Subsurface MEC removal had been completed at the Parker Flats MRA prior to the development of the RI/FS. Additional work in the form of Residential Quality Assurance was implemented in future residential reuse areas.

Operations and Maintenance

The entities who would receive property on the former Fort Ord entered into an agreement with DTSC in 2008 titled *Memorandum of Agreement Among the Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College, and the Department of Toxic Substances Control Concerning Monitoring and Reporting on Environmental Restrictions on the Former Fort Ord, Monterey County, California* (MOA; DTSC, 2008a). The MOA was finalized on February 27, 2008 and lists the requirements for reporting on the implementation of the LUCs placed on the various parcels at the former Fort Ord.

The LUC remedy is being implemented by the Army and FORA based on their respective LUC implementation plans.

The LUCs (safety measures) continue to be implemented, monitored and reported. The land use restrictions have been incorporated into the deeds to the properties which are recorded with Monterey County. In addition, State CRUPs were recorded with Monterey County. After the completion of the implementation of the remedy, in December 2019 DTSC modified the CRUPs to make them consistent with the selected remedy. U.S. Army Garrison, Presidio of Monterey was notified of the selected remedy and the land use restrictions concerning Parcel F2.6 in 2008.

As required, the Army and FORA submit annual monitoring reports to the regulatory agencies.

Statement of Action Complete

Subsurface MEC removal has been conducted in the property, which supports the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the Track 2 ROD for the Parker Flats MRA have been implemented. No further action for munitions response is appropriate.

Document References

- DTSC, 2008. *Memorandum of Agreement Among the Fort Ord Reuse Authority, Monterey County and Cities of Seaside, Monterey, Del Rey Oaks and Marina, California State University Monterey Bay, University of California Santa Cruz, Monterey Peninsula College, and the Department of Toxic Substances Control Concerning Monitoring and Reporting on Environmental Restrictions on the Former Fort Ord, Monterey County, California.* February 27. AR# OE-0714A
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Track 2 ROD Del Rey Oaks MRA

Site Background

Record of Decision, Del Rey Oaks Munitions Response Area, Track 2 Munitions Response Site, Former Fort Ord, California (Track 2 Del Rey Oaks ROD; Army, 2008) was signed on October 6, 2008. The Del Rey Oaks MRA consists of approximately 324 acres of land in the southwestern portion of the former Fort Ord. The Del Rey Oaks MRA includes all or portions of three MRSs, identified as MRS-15 DRO 01, MRS-15 DRO 02, and a portion of MRS-43.

The City of Del Rey Oaks and FORA requested early transfer of the property. The Army conducted a munitions response, developed *Finding of Suitability for Early Transfer with CERCLA 120(h)(3) Covenant Deferral, Del Rey Oaks Parcels, Former Fort Ord, California* (FOSET4; Army, 2004), and transferred the property in 2005 under early transfer authority with EPA and the Governor's concurrence.

Final Track 2 Munitions Response Remedial Investigation/ Feasibility Study, Del Rey Oaks Munitions Response Area, Former Fort Ord, California, Revision 1 (Track 2 Del Rey Oaks RI/FS; MACTEC, 2007) was developed after the property was transferred. The selected remedy is LUCs.

Remedial Investigation and Feasibility Study

Portions of the property were used for live-fire training (e.g., artillery, rockets), and other military training that may have included the use of military munitions. The entire area that comprises the Del Rey Oaks MRA was investigated through MEC sampling, and several removal actions were conducted. The individual investigations and removals may have only covered a portion of the Del Rey Oaks MRA; however, after the above actions were completed, the entirety of the Del Rey Oaks MRA was surveyed by one or more geophysical instruments and all detected MEC was removed. The sampling and removal actions were designed to address MEC to depths of four feet bgs; however, all anomalies, even those deeper than four feet bgs, were investigated and resolved, and all detected MEC was removed within the Del Rey Oaks MRA.

The City of Del Rey Oaks and FORA requested early transfer of the property comprising the Del Rey Oaks MRA. The Army conducted a munitions response, developed FOSET4 (Army, 2004), and transferred the property in 2005 under early transfer authority with EPA and the Governor's concurrence. The FOSET stated that the Del Rey Oaks MRA had been cleared of all dangerous and/or explosive material reasonably possible to detect and that no further munitions response actions were recommended (Army, 2004). The Army's assessment indicated that, with the exception of the approximate 2.5-acre Range 26 berm area consisting of 11 MEC removal grids (hereinafter referred to as the "11-Grid Area"), the property could be transferred with no restriction on land use. However, the Army agreed to enter into a State CRUP with DTSC, with which the City of Del Rey Oaks agreed. The CRUP excluded the following types of use for the entire Del Rey Oaks MRA: residential use, day care facilities that do not have measures to prevent contact with soil, schools for persons under 21 years of age, and hospitals (other than veterinary hospitals). Pursuant to an agreement with DTSC, the City of Del Rey Oaks adopted City Ordinance 259, also known as the "Excavation Ordinance," that addresses the potential explosive safety risks posed by MEC, particularly UXO, by requiring permits for certain soil movement or excavation activities. The requirements of the ordinance are codified in the municipal code at Chapter 15.48. The 11-Grid Area (which encompasses portions of Parcels E29a and E29b.1) was transferred with restrictions requiring that the Army provide additional construction support for intrusive activities that penetrate to depths greater than 4 feet bgs.

As part of the RI, the available data (e.g., archival and MEC removal data) regarding the Del Rey Oaks MRA were reviewed and evaluated according to procedures described in *Final Plan for Evaluation of Previous Work, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California* (HLA, 2000). The evaluation process was documented by completion of a series of checklists.

The project team developed “Overall MEC Risk Scores” based on the Fort Ord Ordnance and Explosives Risk Assessment Protocol (Malcom Pirnie, 2002) to qualitatively estimate the potential explosives safety risks for multiple anticipated receptors that the team assumed would use these areas.

In general, the results of the risk assessment for the Del Rey Oaks MRA indicated that the completed MEC investigation and removal actions decreased the overall risks. For the identified reuse-specific receptors (recreational user, indoor worker, outdoor maintenance worker, construction worker, and adult/child resident), Overall MEC Risk Scores were assigned the lowest score (A). Although the risk is scored as an A for all receptors, it is not possible to confirm that all MEC has been removed from the site. It was anticipated that those people who conduct ground disturbing or intrusive activities (e.g., construction workers, outdoor maintenance workers, and residents) would have a greater chance of encountering MEC potentially present than those people who do not conduct such activities.

In particular, review of the RI data indicated that the majority of the high hazard “Type 3” items (37mm projectiles and 2.36-inch rockets) were removed from the northern and southern portions of the Del Rey Oaks MRA. In addition, penetrating projectiles (primarily 75mm Shrapnel, and 37mm), both as MEC and munitions debris (MD), were found primarily in the northern and southern portions of the Del Rey Oaks MRA. Because these items, if encountered and disturbed, may pose the highest hazard, and are more likely to be found in the subsurface, greater uncertainty is associated with the removal in these areas. These data and the qualitative Overall MEC Risk Scores estimated for these receptors were used in the FS to guide the development and evaluation of response alternatives for the Del Rey Oaks MRA.

The anticipated future uses included development of a resort hotel and golf course, and associated infrastructure; residential use in portions of the property; and commercial/retail facilities and offices.

The Army evaluated three remedial alternatives to address risks from MEC that potentially remain in the Del Rey Oaks MRA during development, and in the future during reuse of the area.

- Alternative 1: No Further Action
- Alternative 2: Conditions on Soil Disturbance Activities to Minimize MEC Exposure
- Alternative 3: Conditions on Soil Disturbance Activities to Minimize MEC Exposure and Residential Use Restrictions Including Contingency to Address Proposed Change in Site Reuse.

Subsurface MEC removal was previously conducted in the Del Rey Oaks MRA. The Conditions on Soil Disturbance Activities to Minimize Exposure to MEC included munitions recognition and safety training for workers that conduct ground-disturbing or intrusive activities; construction support in the 11-Grid Area; and site-wide construction support by the City of Del Rey Oaks in compliance with the excavation ordinance.

Alternative 3 was identified as the preferred alternative because it would be protective of human health and the environment for future land users, and would be effective in the short-term and long-term at mitigating the risk to future users conducting ground-disturbing or intrusive activities

from MEC that might still remain at the site; would require a low level of effort to implement; and a moderate level of effort to administer over time; and would be cost effective. In addition, this alternative accommodates the proposed change in reuse by the property owner in a manner that would be acceptable to DTSC (MACTEC, 2007).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan, Remedial Action is Proposed for Del Rey Oaks Group Munitions Response Area, Track 2 Munitions Response Remedial Investigation/Feasibility Study, Former Fort Ord, California* (Army, 2007). A 30-day public comment period began August 31, 2007, and was extended to 60 days at the request of the public, closing on October 30, 2007. The Army also held a public meeting on September 12, 2007. The public comments were considered prior to remedy selection.

Remedial Alternative 3 (Conditions on Soil Disturbance Activities to Minimize MEC Exposure and Residential Use Restrictions including Contingency to Address Proposed Change in Site Reuse) was selected.

The specific components of the selected remedy include:

(1) Munitions Recognition and Safety Training: Reasonable and prudent precautions should be taken when conducting ground-disturbing or intrusive operations. The Army will provide munitions recognition and safety training, upon request, for any person who will be conducting such activities in the Del Rey Oaks MRA. Munitions recognition and safety training is required for people conducting ground-disturbing or intrusive soil disturbance activities within the 11-Grid Area at depths exceeding 4 feet bgs.

(2) Construction Support in the 11-Grid Area: The Army will provide construction support by UXO-qualified personnel within the 11-Grid Area during soil excavation or movement at depths exceeding 4 feet bgs.

(3) Site-Wide Construction Support: Although the Army does not believe that construction support throughout the entire MRA is necessary based on the results of the Del Rey Oaks MRA RI and Risk Assessment, the City of Del Rey Oaks agreed to implement this requirement, at its expense, through establishment and maintenance of a city ordinance. The City of Del Rey Oaks will provide site-wide construction support by UXO-qualified personnel in compliance with the Excavation Ordinance throughout the remainder of the MRA, as defined in the 2004 Agreement between the City of Del Rey Oaks and DTSC ("the Del Rey Oaks – DTSC Agreement"). Under the agreement, construction support is required for activities that disturb more than 10 cy of soil.

(4) Use Restrictions: A residential use restriction was in effect for the Del Rey Oaks MRA when the property was transferred. The restriction will be modified as follows: the residential use restriction for the central portion of the Del Rey Oaks MRA is no longer required; and the residential use restriction for the remainder (northern and southern portions) of the MRA will be modified to allow for residential use, as appropriate, once DTSC has verified that Residential Protocol (DTSC, 2008b) has been successfully implemented. Any proposal for residential development in the Del Rey Oaks MRA where this restriction applies will be subject to regulatory review. For the purpose of the Track 2 Del Rey Oaks ROD and the RD/RA Work Plan, residential use includes, but is not limited to, residences, day care facilities that do not have measures to prevent contact with soil, schools for persons under 21 years of age, and hospitals (other than veterinary hospitals).

The Track 2 Del Rey Oaks ROD provided that, while the Army did not consider California laws and regulations concerning Land Use Covenants to be potential ARARs, the Army had entered

into a State CRUP at the time the property was transferred, and after the Track 2 Del Rey Oaks ROD was signed, the existing covenant would be modified, if appropriate, to document the land use restrictions included in the selected remedy. Although DTSC and EPA Region IX disagreed with the Army's determination that California laws and regulations concerning Land Use Covenants were not potential ARARs, they agreed to disagree on this issue since the Army had executed the State CRUP and agreed that it would be modified, if appropriate, to be consistent with the selected remedy, in a manner acceptable to DTSC.

The Army and the City of Del Rey Oaks will maintain these LUCs until EPA and DTSC concur that the site is protective of human health and environment without construction support and munitions recognition and safety training on the basis of: (1) further site evaluation incorporating new information (e.g. limited geophysical mapping, site development); and/or (2) where, using construction support, it is determined that the depth of soil disturbance related to development activities is sufficient to address the uncertainty of MEC remaining in soil, and any MEC found as part of the development are removed.

The regulatory agencies identified the Residential Protocol as a suitable mechanism to terminate the residential use restriction once DTSC has verified successful implementation of the Residential Protocol, which will confirm that the subject area is suitable for residential use. During development activities by the property owner, initial grading of the top layer of soil would be followed by a geophysical investigation, as described in DTSC's Residential Protocol, to confirm that MEC are not present in those areas. Because residential reuse was not part of the designated use at the time the property was transferred from the Army, any costs associated with changing the reuse by implementing this or any other activity will be the reuser's responsibility.

In addition, Long Term Management Measures considered as implementation and management aspects of the remedial alternatives, rather than as specific mitigation measures, will also be implemented, including the State CRUP, a Federal deed, annual letter reporting, and five-year review reporting.

The primary RAOs for the Del Rey Oaks MRA, based on EPA RI/FS guidance (EPA, 1988), are to achieve the EPA threshold criteria of "Overall Protection of Human Health and the Environment" and "Compliance with ARARs."

Response Actions

Draft Final Remedial Design/Remedial Action Work Plan, Del Rey Oaks Munitions Response Area, Former Fort Ord Del Rey Oaks, California (ARCADIS, 2010) was prepared by the City of Del Rey Oaks as a result of the selection of LUCs as a component of the remedy in accordance with the ROD. The RD/RA Work Plan presents the LUC objectives as described in the ROD and remedy implementation actions to be performed to ensure the LUC objectives are met.

In a letter dated August 20, 2010, EPA determined that all remedial actions have been implemented and completed at the Track 2 Del Rey Oaks MRA (EPA, 2010).

Cleanup Levels

Several response actions resulted in the entirety of the Del Rey Oaks MRA having been surveyed by one or more geophysical instruments and all detected MEC was removed.

Operations and Maintenance

The entities who would receive property on the former Fort Ord entered into an agreement with DTSC concerning monitoring and reporting on environmental restrictions on the former Fort Ord

(DTSC, 2008). The MOA lists the requirements for reporting on the implementation of the LUCs placed on the various parcels at the former Fort Ord.

The LUC remedy is being implemented by the Army and the City of Del Rey Oaks based on the LUC implementation plan. The LUCs (safety measures) continue to be implemented, monitored and reported. The land use restrictions have been incorporated into the deeds to the properties which are recorded with Monterey County. In addition, a State CRUP was recorded with Monterey County. The City of Del Rey Oaks submits annual monitoring reports to the regulatory agencies according to the MOA.

At the time the property was transferred, the Army entered into a State CRUP pending final remedy selection. After the ROD was signed, a partial termination of the CRUP environmental restriction was granted by the DTSC pursuant to a request made by the City of Del Rey Oaks. On September 17, 2012, the City of Del Rey Oaks and DTSC agreed to *Amendment No. 1 and Partial Termination of Covenant to Restrict Use of Property Environmental Restriction* (City of Del Rey Oaks, 2012) to be consistent with the selected remedy. The partial termination applies to 105 acres in the central portion of the Del Rey Oaks MRA. All other provisions of the covenant remain in full force and effect for the remainder of the property.

Statement of Action Complete

Subsurface MEC removal has been conducted in the property, which supports the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the Track 2 Del Rey Oaks ROD have been implemented. No further action for munitions response is appropriate.

Document References

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- HLA, 2000. *Final Plan for Evaluation of Previous Work, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California*. December 4. AR# OE-0283G and AR# OE-0444
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Track 2 MRS-34 (FAAF) (NFA)

Site Background

Final Record of Decision, Track 2 Munitions Response Site 34, Former Fritzsche Army Airfield, Former Fort Ord, California (Army, 2015) was signed on September 3, 2015. MRS-34 is a 70.5-acre site located in the northwestern portion of the former Fort Ord north of Reservation Road in the vicinity of what was formerly the FAAF and is now the Marina Municipal Airport.

Removal actions for MEC were performed between 1994 and 1999. The site was transferred as an early transfer to the City of Marina in 2001 for development use. The Army developed *Final Track 2 Munitions Response, Remedial Investigation, Munitions Response Site 34, Fritzsche Army Airfield Area, Former Fort Ord, California* (ITSI, 2012) including a risk assessment, to evaluate and address potential risk to subsequent site users. The subsequent MRS-34 ROD selected NFA regarding munitions response.

Remedial Investigation and Feasibility Study

The site was designated as a development parcel in accordance with *Fort Ord Base Reuse Plan* (FORA, 1997). The site was transferred to the City of Marina in 2001. Parcel L5.1.1 (approximately 60 acres) was transferred as a public benefit conveyance (PBC) through the Federal Aviation Administration. A 12-acre parcel (L5.1.1.1) was transferred as an economic development conveyance (EDC) to FORA for subsequent transfer to the City of Marina. The deeds contain restriction on the use of the properties as follows: "The Property is suitable only for the intended use as resort hotel, golf course, business park, airport support, and related infrastructure modifications. In addition, the following uses as hereinafter described shall be allowed provided that they do not include private landscaping or unsurfaced yard areas: timeshare and vacation club rooms, spa, health, athletic and related facilities, commercial recreation, employee recreational facilities, day care facilities and nurseries, caretaker units, and airport loft living units."

Based on the archives search reports, the area now designated MRS-34 was initially identified in a 1946 Fort Ord Master Plan map as a "Bazooka and Rifle Grenade Practice" range. The duration of these activities is unknown, but subsequent historical maps (1954 and onward) do not indicate the presence of the same range and indicate other uses in the area, including calibration of tank gun sights and driver training, both of which do not include use of munitions. Removal actions for MEC were performed between 1994 and 1999 in which all detected MEC on and below ground surface were removed.

The data evaluation process for MRS-34 was documented by completion of a series of checklists according to procedures described in the *Final Plan for Evaluation of Previous Work* (HLA, 2000). Based on the results of historical literature review, site investigations, and munitions removal actions, the site appears to have been used for anti-tank training and practice rifle grenade training, which included firing of shoulder-launched projectiles, such as practice rifle grenades and 2.36-inch rockets, that occurred in the 1940s and possibly into the 1950s. Expended smoke hand grenades and small arms debris also were identified, indicating training activity for those items also occurred at the site.

Reviews of the available literature, removal results, and equipment performance results indicate that the MRS-34 geophysical investigation successfully detected, excavated, and recovered MEC items, the potential safety hazard has been removed and MEC are not expected to be present at the site.

The risk assessment was performed using the Fort Ord Ordnance and Explosives Risk Assessment Protocol (Malcolm Pirnie, 2002). All receptors evaluated received the Overall MEC Risk Score of A (lowest risk). It should be noted that, because of uncertainties identified in the risk assessment, it is not possible to confirm that all MEC has been removed from the site; therefore it is possible that an intruding receptor (i.e., the outdoor maintenance worker and construction worker) could encounter a MEC item. However, the potential that MEC will be encountered in the future is highly unlikely.

Selected Remedy and Decision Documents

The NFA alternative was presented in *Superfund Proposed Plan, No Further Action is Proposed for Munitions Response Site 34, Track 2 Munitions Response Remedial Investigation, Former Fort Ord, California* (Army, 2013). A 30-day public comment period was held between May 31, 2013 and July 1, 2013. The Army also held a public meeting on June 11, 2013. The public comments were considered prior to remedy selection.

The selected remedy for MRS-34 (FAAF) is NFA.

While not required as part of the remedy, reasonable and prudent precautions should be taken when conducting intrusive operations in this area. Such measures could include training personnel involved in intrusive operations at the former Fort Ord in munitions recognition and safety training to increase their awareness of and ability to identify suspected MEC items.

Should any ordnance-related item be found within any of the areas addressed in the MRS-34 ROD, the Army will take an appropriate immediate action (i.e., removing the found item, recording the incident), and within 90 days of the discovery, submit a plan for appropriate follow-on action to EPA and DTSC for consultation, pursuant to Section 7.7(b) of the Fort Ord FFA.

Response Actions

Subsurface MEC removal had been completed at the MRS-34 prior to the development of the RI. The completed actions support unrestricted use.

Cleanup Levels

No further action regarding munitions response is required for MRS-34.

Operations and Maintenance

No operations or maintenance are necessary for the selected remedy.

The underlying property was transferred to FORA and the City of Marina in 2001 for development use. The Army will modify the deed to be consistent with the selected remedy.

Statement of Action Complete

Subsurface MEC removal has been conducted in the property. No further action related to MEC is necessary to ensure the protection of human health and the environment at MRS-34. No known MEC item is present and MEC is not expected to be present at the site.

Document References

- FORA, 1997. *Fort Ord Base Reuse Plan*.
- HLA, 2000. *Final Plan for Evaluation of Previous Work, Ordnance and Explosives Remedial Investigation/Feasibility Study, Former Fort Ord, California*. December 4. AR# OE-0283G and AR# OE-0444

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- ITSI, 2012. *Final Track 2 Munitions Response, Remedial Investigation, Munitions Response Site 34, Fritzsche Army Airfield Area, Former Fort Ord, California*. September 28. AR# OE-0768B
- Army, 2013. *Superfund Proposed Plan, No Further Action is Proposed for Munitions Response Site 34, Track 2 Munitions Response Remedial Investigation, Former Fort Ord, California*. May 28. AR# OE-0793
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ESCA Group 1 ROD

Site Background

Record of Decision, Group 1 Seaside and Parker Flats (Phase II) Munitions Response Areas, Former Fort Ord, California (Group 1 ROD; Army 2018) was signed on September 25, 2018.

The ESCA Group 1 Areas include the Seaside MRA and the ESCA Parker Flats MRA (Phase II). The ESCA Parker Flats MRA (Phase I) was included in Track 2 ROD for the Parker Flats MRA (Army, 2008).

The Group 1 MRAs include sites where MEC were encountered and munitions responses (munitions investigation and removal) were conducted. The underlying property was transferred to FORA in 2009 as part of the ESCA. FORA developed *Final Group 1 Remedial Investigation/Feasibility Study, Seaside and Parker Flats (Phase II) Munitions Response Areas, Former Fort Ord, Monterey County, California* (ESCA RP Team, 2017). The selected remedy is LUCs.

Remedial Investigation and Feasibility Study

The Seaside MRA is located in the southwestern portion of the former Fort Ord, bordered by the City of Seaside to the west, the historical impact area to the east, Eucalyptus Road to the north, and Track 2 Del Rey Oaks MRA to the south. The Seaside MRA is wholly contained within the jurisdictional boundaries of the City of Seaside, encompasses approximately 423 acres, and contains the following four Parcels: E23.1, E23.2, E24, and E34.

The Seaside MRA is located within the westernmost part of the 8,000-acre historical impact area. The Seaside MRA contained former firing points and former targets associated with small arms training, non-firing target range training, mortar and anti-tank training, and booby trap training. Based on the Group 1 RI/FS Report, the MRA appears to have been used for various types of training in the vicinity of known firing ranges.

Investigations and removal actions were conducted by the Army as TCRA and a Non-Time-Critical Removal Action (NTCRA). Approximately 35 acres, such as paved areas, were identified as special case areas (SCAs). Under the ESCA, FORA conducted additional removal actions on the SCAs. The anomalies that represented potential MEC were intrusively investigated and removed, except in a few areas where anomalies could not be adequately investigated due to physical obstructions and/or equipment interference. Further evaluation under the Residential Quality Assurance (RQA) process was performed in the designated future residential reuse areas of the Seaside MRA.

The Parker Flats MRA is located in the central portion of the former Fort Ord, bordered by the CSUMB Off-Campus MRA and the County North MRA to the north, and the Interim Action Ranges MRA to the south. The Parker Flats MRA (Phase I and Phase II areas) encompasses approximately 1,172 acres and fully contains Parcels E18.1.1, E18.1.2, E18.1.3, E18.4, E19a.1, E19a.2, E19a.5, E20c.2, E21b.3, L20.18, L23.2, and L32.1, and portions of Parcels E19a.3 and E19a.4. The area completed under the Track 2 Parker Flats ROD was approximately 698 acres (the ESCA Parker Flats MRA Phase I); the remaining approximately 474 acres were included in the Group 1 ROD (the ESCA Parker Flats MRA Phase II.)

The historical use of the Parker Flats MRA Phase II area was predominantly for training maneuvers including the use of practice hand grenades. In addition, a southern portion of the Parker Flats MRA Phase II appears to have been used for practice hand grenade, projectile and mortar training.

Approximately 426 acres of the Parker Flats MRA Phase II were investigated by FORA under the ESCA. A digital geophysical mapping (DGM) survey and target investigation were conducted for the accessible areas of the designated future residential and non-residential development areas; unpaved roads and trails, including 5-foot buffer area within the habitat reserve area. Analog to depth of detection was conducted for areas not accessible to digital geophysical survey for the designated future residential and non-residential development areas. Analog instrument-aided surface and near-surface investigation was conducted for the habitat reserve area. Analog and digital detection instruments were used over the Parker Flats MRA Phase II to locate subsurface anomalies, and detected anomalies representing potential MEC were resolved.

Additionally, DGM survey and target investigation was conducted by FORA under Eucalyptus Road in Parcel E20c.2 and a portion of Eucalyptus Road in Parcel L20.18 during construction support for the Eucalyptus Roadway Extension Corridor project in June 2011.

Further evaluation under the RQA process was performed in the designated residential reuse areas of the ESCA Parker Flats MRA.

Results of the ESCA RQA Process applied at the Seaside MRA and the ESCA Parker Flats MRA were evaluated under the DTSC's *Residential Protocol* (DTSC, 2008). FORA issued Residential Protocol Implementation Technical Reports (ESCA RP Team, 2017b and 2017d) using the data collected during the ESCA RQA Pilot Study and Implementation Study in the designated future residential reuse areas. The reports also supported modifying the existing State CRUPs to remove the residential use restrictions from these portions of the Seaside MRA and the ESCA Parker Flats MRA.

The following three remedial alternatives were developed and evaluated in the Group 1 RI/FS Report (ESCA RP Team, 2017c) to address the risk from MEC for the future land users.

- Alternative 1: No Further Action
- Alternative 2: Land Use Controls; and
- Alternative 3: Additional Subsurface MEC Remediation.

Subsurface MEC removal was previously conducted in the Group 1 MRAs. Alternative 2 (LUCs) included (1) munitions recognition and safety training for people involved in intrusive activities; (2) construction support by UXO-qualified personnel during intrusive activities; (3) access management measures in areas designated for habitat reserve; (4) continuation of the existing residential use restriction in areas designated for non-residential reuse or for habitat reserve; and (5) restrictions against inconsistent uses (applicable to the habitat reserve areas).

Alternative 2 was identified as the preferred alternative because it would be protective of human health for the future land users, and would be effective in the short- and long-term at mitigating the risk to future workers conducting intrusive activities from potentially remaining MEC. This remedial alternative would require a low level of effort to implement, a moderate level of effort to administer over time, and would be cost effective. No ARARs were identified for this alternative; however, LUCs would be implemented in a manner consistent with Federal and State guidance (ESCA RP Team, 2017c).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan: Group 1 Remedial Investigation/Feasibility Study, The Public is Invited to Comment and Attend a Public Meeting on a Proposed Remedial Action for the Seaside and Parker Flats (Phase II) Munitions Response Areas on the Former Fort Ord* (Army, 2017). A 30-day public comment period was

held from September 15, 2017 to October 16, 2017. The Army also held a public meeting on September 27, 2017. The public comments were considered prior to remedy selection.

Remedial Alternative 2 (LUCs) was selected as the remedy to address MEC risks at the Group 1 MRAs. The selected remedy includes LUCs because detection technologies may not have detected all MEC present. The LUCs that will be implemented at the Group 1 MRAs include requirements for:

- (1) military munitions recognition and safety training for workers who will conduct ground-disturbing or intrusive activities;
- (2) construction support to manage the risk associated with the potential presence of military munitions for ground-disturbing or intrusive activities;
- (3) access management measures in areas designated for habitat reserve;
- (4) restrictions prohibiting residential use in areas designated for non-residential development reuse or for habitat reserve; and
- (5) restrictions against inconsistent uses (applicable to the habitat reserve areas).

For the purpose of this decision document, residential use includes: single family or multi-family residences; childcare facilities; playgrounds; hospitals; nursing homes or assisted living facilities; and any type of educational facility for children or young adults in grades kindergarten through 12. Any proposal for residential use in the designated non-residential development reuse or habitat reserve portions of the Group 1 MRAs will be subject to regulatory agency and Army review and approval. The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as the owner of the real estate or as a government entity.

The ESCA Group 1 ROD provided that, while the Army did not consider California laws and regulations concerning CRUPs to be potential ARARs, the Army had entered into CRUPs with the DTSC at the time the property was transferred to FORA. The DTSC would modify the existing CRUPs, as appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagreed with the Army's determination that California laws and regulations concerning CRUPs were not potential ARARs, they agreed to disagree on this issue since the Army had executed the CRUPs and the DTSC would modify the CRUPs, as appropriate, to be consistent with the identified remedy. After the completion of the implementation of the remedy, DTSC modified the CRUPs to make them consistent with the selected remedy. Following this CRUP modification process it became unnecessary for the Army to continue to participate the CRUP process. The remedial land use restrictions are recorded in deeds to the property.

Each component of the LUCs will remain in place until EPA and DTSC concur that the site is protective of human health and the environment without LUC so as to allow for unrestricted use and exposure. This concurrence may be based on: (1) new information (e.g., limited geophysical mapping, site development); or (2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and military munitions encountered during such activities is removed.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA assumes full responsibility for completion of necessary CERCLA response actions (except Army Obligations) which include implementing, maintaining, reporting, and enforcing the land use controls.

As part of the LUC implementation strategy, long-term management measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Group 1 MRAs.

The RAO developed for the protection of human health and the environment for the Group 1 MRAs is to prevent or reduce the potential for the Group 1 MRA reuse receptors to come in direct contact with MEC or other munitions potentially remaining in subsurface and minimize potential impacts from such exposures.

Response Actions

In February 2019 FORA submitted Final Group 1 LUCIP/OMP to provide information on how the remedy selected in the Group 1 ROD (Army, 2018) will be implemented and maintained. The Group 1 LUCIP/OMP presents the LUC objectives as described in the ROD and describes remedy implementation actions to be performed in accordance with the ROD to ensure the LUC objectives are met.

In a letter dated February 28, 2019, EPA determined that all remedial actions have been implemented and completed at the Seaside MRA and the ESCA Parker Flats MRA Phase II (EPA, 2019).

Subsequent to the EPA findings of completion of remedial action for the Group 1 MRAs (Seaside and ESCA Parker Flats Phase II) and for the Track 2 Parker Flats MRA (including the ESCA Parker Flats Phase I), the Group 1 LUCIP was revised ("Revised Final") to incorporate the ESCA Parker Flats MRA Phase I to ease implementation of the LUCs. *Revised Final Group 1 Land Use Controls Implementation Plan/Operation and Maintenance Plan, Seaside and Parker Flats (Phase II) MRAs, Former Fort Ord, Monterey County, California* (Group 1 LUCIP/OMP) was issued by FORA in December 2019 (ESCA RP Team, 2019).

Cleanup Levels

Subsurface MEC removal had been completed at the Group 1 MRAs prior to the development of the RI/FS. Additional work in the form of Residential Quality Assurance was implemented in future residential reuse areas.

Operations and Maintenance

The LUCIP/OMP annual inspections and record review results will be summarized by FORA in an annual LUC status report using a letter report format. MPC, the County, and the City of Seaside have agreed to conduct annual LUC reporting upon property transfer as established in the executed MOA with DTSC and State CRUPs. The existing "MOA with DTSC Annual LUC Report Outline" was expanded to fulfill the requirements of the LUCIP/OMP. Annual LUC monitoring reports cover the period from July 1 to June 30 of each year. FORA or the County of Monterey compiles the annual LUC monitoring reports from individual jurisdictions and submits them to the Army, EPA, and DTSC. The annual LUC status reports are provided to the Army for inclusion in the five-year reviews.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be implemented.

As part of the early transfer of the subject property, the Army entered into State CRUPs with DTSC that documented land use restrictions and that have already been recorded against the deeds. After the completion of the implementation of the remedy, in December 2019 DTSC modified the CRUPs to make them consistent with the selected remedy.

The existing deeds to FORA for the Group 1 MRA parcels include the following land use restrictions: (1) prohibition on residential use; and (2) prohibition on excavation (unless construction support and munitions recognition and safety training, referred to as “MEC recognition and safety training” in the State CRUPs, are provided). The Army will modify the existing land use restrictions in the Federal deeds, as necessary, to reflect the selected remedy.

The deeds and CRUPs have been recorded with Monterey County.

Statement of Action Complete

Removal of MEC has been conducted in the property, which supports the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the ESCA Group 1 ROD for the Seaside MRA and Parker Flats MRA (Phase II) have been implemented. No further action for munitions response is appropriate.

Document References

- ESCA RP Team, 2017a. *Final Group 1 Residential Protocol Implementation Technical Report, Seaside Munitions Response Area, Former Fort Ord, Monterey County, California*. March 29. AR# ESCA-0306C
- ESCA RP Team, 2017b. *Final Residential Protocol Implementation Technical Report, Parker Flats Munitions Response Area, Former Fort Ord, Monterey County, California*. March 29. AR# ESCA-0311C
- ESCA RP Team, 2017c. *Final Group 1 Remedial Investigation/Feasibility Study, Seaside and Parker Flats (Phase II) Munitions Response Areas, Former Fort Ord, Monterey County, California*. May 4. AR# ESCA-0318B
- ESCA RP Team, 2017d. *Final Group 1 Supplemental Residential Protocol Implementation Technical Report, Seaside Munitions Response Area, Former Fort Ord, Monterey County, California*. December 12. AR# ESCA-0342B
- ESCA RP Team, 2019. *Revised Final Group 1 Land Use Controls Implementation Plan/Operation and Maintenance Plan, Seaside and Parker Flats Munitions Response Areas, Former Fort Ord, Monterey County, California*. December 19. AR# ESCA-0361E
- California Department of Toxic Substances Control, 2008. *Residential Protocol*, dated March, 2008. March 18. AR# OE-0637A
- Army, 2017. *Superfund Proposed Plan: Group 1 Remedial Investigation/Feasibility Study, The Public is Invited to Comment and Attend a Public Meeting on a Proposed Remedial Action for the Seaside and Parker Flats (Phase II) Munitions Response Areas on the Former Fort Ord*. September 6. AR# ESCA-0343
- Army, 2018. *Record of Decision, Group 1 Seaside and Parker Flats Phase II Munitions Response Areas, Former Fort Ord, California*. September 25. AR# ESCA-0359
- EPA, 2019. *Remedial Action Completion at Group 1 - Seaside and Parker Flats (Phase II) and Group 4 - Future East Garrison Munitions Response Areas, Former Fort Ord, Monterey County, California*. February 28. AR# ESCA-0370

ESCA Group 2 ROD

Site Background

Record of Decision, Group 2 California State University Monterey Bay Off-Campus Munitions Response Area, Former Fort Ord, California (Group 2 ROD; Army, 2015) was signed on February 26, 2015.

The CSUMB Off-Campus MRA is a site where MEC were found and munitions response (MEC removal) actions were conducted. The underlying property was transferred to FORA in 2009 as part of the ESCA. FORA developed *Final Group 2 Remedial Investigation/Feasibility Study, California State University Off-Campus Munitions Response Area, Former Fort Ord, Monterey County, California* (ESCA RP Team, 2013). The selected remedy is LUCs.

Remedial Investigation and Feasibility Study

The CSUMB Off-Campus MRA is located in the north-central portion of the former Fort Ord, bordered by Inter-Garrison Road to the north, the County North MRA to the east and southeast, the Parker Flats MRA to the south, and 8th Avenue to the west. The CSUMB Off-Campus MRA encompasses approximately 332.6 acres and is composed mostly of MRS-31, which includes four smaller MRSs: MRS-04C, MRS-07, MRS-08, and MRS-18. The remainder of the MRA consists of MRS-13C and a portion of MRS-13B.

The MRA included several training areas including: chemical, biological, and radiological (CBR) training (MRS-04C); mine and booby trap training (MRS-07 and MRS-08); practice mortar training (MRS-13B and MRS-13C); minefield practice area (MRS-18); and troop maneuvers, confidence course, and land navigation training (MRS-31). Recovered MEC and MD also indicated that practice hand grenade training and practice rifle grenade training occurred in MRS-31.

Initial sampling was conducted in 1994. Based on sampling results, 3- to 4-foot deep removal actions were conducted within the majority of the MRA from 1994 to 1995 and in 1997. The MEC and MD encountered within the MRA during the previous removal actions were consistent with the documented historical uses. The majority of these items were associated with practice and pyrotechnic munitions. Under the ESCA, FORA conducted an RI for the CSUMB Off-Campus MRA. Further evaluation under the RQA process was performed in the designated future residential reuse area of the CSUMB Off-Campus MRA.

An RQA Pilot Study was conducted by FORA in the approximately 49-acre designated future residential reuse area of the CSUMB Off-Campus MRA as an additional verification and quality assurance of prior MEC investigations and removal actions.

The RQA Pilot Study activities included removal of detected MEC and MD from the designated future residential reuse area to the depth of detection. Based on the RQA Process evaluation, including results of the RQA Pilot Study and RQA Implementation Study, FORA, in consultation with the EPA and DTSC, determined that the designated future residential reuse area in the CSUMB Off-Campus MRA was recommended as acceptable for future residential reuse with appropriate institutional controls, such as applicability of the local Digging and Excavation on the Former Fort Ord Ordinance, future construction support related to munitions, and property transfer disclosures. DTSC had released the Residential Protocol (DTSC, 2008) that, when successfully implemented and approved by DTSC, would provide a basis to remove a State residential CRUP on munitions response sites. FORA issued the *Final Residential Protocol Implementation Report, CSUMB Off-Campus MRA*, in October 2014 (ESCA RP Team, 2014) to provide data and conclusions to support the removal of the residential CRUP on the designated

residential area. The DTSC amended the State CRUP (recorded in June 2016) to indicate that the residential use restriction is applicable only to non-residential reuse areas in the CSUMB Off-Campus MRA. The re-issued State CRUP was recorded with Monterey County.

The following three remedial alternatives were developed and evaluated in the Group 2 RI/FS Report (ESCA RP Team, 2013) to address the risk from MEC for the future land users.

- Alternative 1: No Further Action
- Alternative 2: Land Use Controls; and
- Alternative 3: Additional Subsurface MEC Remediation.

Subsurface MEC removal was previously conducted in the Group 2 MRA. Alternative 2 (LUCs) included (1) munitions recognition and safety training for people involved in intrusive activities; (2) construction support by UXO-qualified personnel during intrusive activities; and (3) restriction prohibiting residential use in the proposed future non-residential reuse area.

Alternative 2 was identified as the preferred alternative because it would be protective of human health for the future land users, and would be effective in the short- and long-term at mitigating the risk to future workers and residents conducting intrusive activities from potentially remaining MEC. This remedial alternative would require a low level of effort to implement, a moderate level of effort to administer over time, and would be cost effective. No ARARs were identified for this alternative; however, LUCs would be implemented in a manner consistent with Federal and State guidance (ESCA RP Team, 2013).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan: Remedial Action is Proposed for California State University Monterey Bay Off-Campus Munitions Response Area, Group 2 Remedial Investigation/Feasibility Study, Former Fort Ord, Monterey County, California* (Army, 2013). A 30-day public comment period was held from June 12, 2013 to July 12, 2013. The Army also held a public meeting on June 19, 2013. The public comments were considered prior to remedy selection.

Remedial Alternative 2 (LUCs) was selected as the remedy to address MEC risks at the CSUMB Off-Campus MRA. The selected remedy includes LUCs because detection technologies may not detect all MEC present. The LUCs include requirements for:

- (1) munitions recognition and safety training for people involved in intrusive activities;
- (2) construction support by UXO-qualified personnel during intrusive activities; and
- (3) restriction prohibiting residential use in the proposed future non-residential reuse area.

For the purpose of this decision document, residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army 2007). Any proposal for residential development in the proposed non-residential reuse portion of the CSUMB Off-Campus MRA will be subject to regulatory agency and Army review and approval. The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as the owner of the real estate or as a government entity.

The ESCA Group 2 ROD provided that, while the Army did not consider California laws and regulations concerning CRUPs to be potential ARARs, the Army had entered into a CRUP with the DTSC at the time the property was transferred to FORA. The DTSC would modify the

existing CRUP, as appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagreed with the Army's determination that California laws and regulations concerning CRUPs were not potential ARARs, they agreed to disagree on this issue since the Army had executed the CRUP and the DTSC would modify the CRUP, as appropriate, to be consistent with the identified remedy. After the completion of the implementation of the remedy, DTSC issued an amended CRUP to make it consistent with the selected remedy. Following the CRUP modification process it became unnecessary for the Army to continue to participate the CRUP process. The remedial land use restrictions are recorded in deeds to the property.

LUCs will be maintained until EPA and DTSC concur that the land use may be conducted in a manner protective of human health and the environment without the LUCs. This concurrence may be based on: (1) new information (e.g., limited geophysical mapping, site development); or (2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and any MEC encountered during such activities is removed.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA assumes full responsibility for completion of necessary CERCLA response actions (except Army Obligations) which include implementing, maintaining, reporting, and enforcing the land use controls.

As part of the LUC implementation strategy, long-term management measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Group 2 MRA.

The remedial action objective developed for the protection of human health and the environment for CSUMB Off-Campus MRA is to prevent or reduce the potential for the CSUMB Off-Campus MRA reuse receptors to come in direct contact with MEC items potentially remaining in subsurface soil.

Response Actions

Final Group 2 Land Use Controls Implementation Plan/Operation and Maintenance Plan, California State University Monterey Bay Off-Campus Munitions Response Area, Former Fort Ord, Monterey County, California (Group 2 LUCIP/OMP) was issued by FORA in September 2018 (ESCA RP Team, 2018). The purpose of the Group 2 LUCIP/OMP is to provide information on how the remedy selected in the Group 2 ROD (Army, 2015) will be implemented and maintained. The Group 2 LUCIP/OMP presents the LUC objectives as described in the ROD and describes remedy implementation actions to be performed in accordance with the ROD to ensure the LUC objectives are met.

In a letter dated September 27, 2018, EPA determined that all remedial actions have been implemented and completed at the CSUMB Off-Campus MRA (EPA, 2018).

Cleanup Levels

Subsurface MEC removal had been completed at the Group 2 MRA prior to the development of the RI/FS. Additional work in the form of Residential Quality Assurance was implemented in future residential reuse areas.

Operations and Maintenance

The LUCIP/OMP annual inspections and record review results will be summarized by FORA in an annual LUC status report using a letter report format. CSUMB has agreed to conduct annual LUC reporting upon property transfer as established in the executed MOA with DTSC and State

CRUP. The existing “MOA with DTSC Annual LUC Report Outline” was expanded to fulfill the requirements of the LUCIP/OMP. Annual LUC monitoring reports cover the period from July 1 to June 30 of each year. FORA or the County of Monterey compiles the annual LUC monitoring reports from individual jurisdictions and submits them to the Army, EPA, and DTSC. The annual LUC status reports are provided to the Army for inclusion in the five-year reviews.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be implemented.

As part of the early transfer of the subject property, the Army entered into a State CRUP with the DTSC that documented land use restrictions. After the signature of the ROD, DTSC concurred that the Residential Protocol (DTSC 2008) had been successfully and correctly implemented, and issued an amended CRUP in June 2016 to document the land use restrictions included in the identified remedy.

The existing deed to FORA for the CSUMB Off-Campus MRA parcel includes the following land use restrictions: (1) residential use restriction; and (2) excavation restrictions (unless construction support and MEC recognition and safety training are provided). The Army will modify the existing land use restrictions in the federal deed, as necessary, to reflect the selected remedy.

The deeds and CRUPs have been recorded with Monterey County.

Statement of Action Complete

Removal of MEC has been conducted in the property, which supports the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the ESCA Group 2 ROD for the CSUMB Off-Campus MRA have been implemented. No further action for munitions response is appropriate.

Document References

- ESCA RP Team, 2013. *Final Group 2 Remedial Investigation/Feasibility Study, California State University Off-Campus Munitions Response Area, Former Fort Ord, Monterey County, California*. February 18. AR# ESCA-0177E
- ESCA RP Team, 2014. *Final Residential Protocol Implementation Report, California State University Off-Campus Munitions Response Area, Former Fort Ord, Monterey County, California*. October 21. AR# ESCA-0284B
- ESCA RP Team, 2018. *Final Group 2 Land Use Controls Implementation Plan/Operation and Maintenance Plan, California State University Monterey Bay Off-Campus Munitions Response Area, Former Fort Ord, Monterey County, California*. September 7. AR# ESCA-0305B
- California Department of Toxic Substances Control, 2008. *Residential Protocol*, dated March, 2008. March 18. AR# OE-0637A
- Army, 2013. *Superfund Proposed Plan: Remedial Action is Proposed for California State University Monterey Bay Off-Campus Munitions Response Area, Group 2 Remedial Investigation/Feasibility Study, Former Fort Ord, Monterey County, California*. June 5. AR# ESCA-0267
- Army, 2015. *Record of Decision, Group 2 California State University Monterey Bay Off-Campus Munitions Response Area, Former Fort Ord, California*. February 26. AR# ESCA-0298
- EPA, 2018. *Remedial Action Completion at Interim Action Ranges (IAR), California State University Monterey Bay Off-Campus (Group 2), Del Rey Oaks/Monterey,*

*Laguna Seca Parking, and Military Operations in Urban Terrain Site (Group 3)
Munitions Response Areas, Former Fort Ord, Monterey County, California. September
27. AR# ESCA-0363*

ESCA Group 3 ROD

Site Background

Record of Decision, Group 3 Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California (Group 3 ROD; Army, 2014) was signed on November 25, 2014.

The ESCA Group 3 Areas include the Del Rey Oaks/Monterey MRA, the Laguna Seca Parking MRA, and the MOUT Site MRA.

The Group 3 MRAs include sites where MEC were found and munitions response (MEC removal) actions were conducted. The underlying property was transferred to FORA in 2009 as part of the ESCA. FORA developed *Final Group 3 Remedial Investigation/Feasibility Study, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, Monterey County, California* (ESCA RP Team, 2012). The selected remedy is LUCs.

Remedial Investigation and Feasibility Study

The Del Rey Oaks/Monterey MRA is located in the southwestern portion of the former Fort Ord and encompasses approximately 30 acres of undeveloped land, comprised of two non-contiguous portions of MRS-43 and a portion of the South Boundary Road. Historical records and recovered MEC and MD indicate that MRS-43 was previously used for artillery training with 37mm projectiles.

The MEC removal actions were conducted in portions of the Del Rey Oaks/Monterey MRA. All detected MEC items were removed. Two small portions of the MRA were not subjected to MEC removal actions. SiteStat/GridStat (SS/GS) investigation grids were either located partially within or immediately adjacent to the two areas. No MEC or MD items were recovered from the SS/GS investigation grids located within or immediately adjacent to these two areas. Therefore, it is expected that finding MEC in either of these two areas would not be likely.

The DRO/Monterey MRA is designated for habitat management and business park/light industrial and office/research and development reuse in the *Fort Ord Base Reuse Plan* (FORA, 1997).

The Laguna Seca Parking MRA is located in the south-central portion of the former Fort Ord adjacent to the Laguna Seca Raceway and encompasses approximately 276 acres. The Laguna Seca Parking MRA includes four MRSs: MRS-14A, MRS-29, MRS-30, and MRS-47. Historical records and recovered MEC and MD indicate that these MRSs were previously used for artillery training, mortar training, troop training, and basic maneuvers.

The MEC removal actions completed at the Laguna Seca Parking MRA were designed to address MEC to a depth of 4 feet bgs in MRS-29, MRS-30, MRS-47, and central portion of MRS-14A, and to a depth of 1 foot bgs along the western and eastern slopes of MRS-14A. All anomalies, even those deeper than 4 feet in MRS-29, MRS-30, MRS-47, and central portion of MRS-14A, were investigated with all detected MEC encountered removed within the MRA. MEC removal actions were not completed in two whole and four partial grids in MRS-14A due to terrain-related inaccessibility. Based upon the results of the MEC removal action conducted immediately surrounding these grids, it is not anticipated that MEC items posing a significant risk would remain in the six grids.

The Laguna Seca Parking MRA is designated for open space/recreation reuse in the Base Reuse Plan (FORA, 1997) and development with reserve areas or development with restrictions

in the HMP (USACE, 1997). The northernmost and southernmost portions of the MRA will continue to be used for overflow parking during Laguna Seca Raceway events and includes parking, staging, and event-related roadway access along Barloy Canyon Road and South Boundary Road. The central portion of the MRA, including an open space/recreation reuse area and Highway 68 Bypass right of way, is designated for development with restrictions.

The MOUT Site MRA is located in the central portion of the former Fort Ord within the northeastern portion of the historical impact area and encompasses approximately 58 acres. The MRA consists of MRS-28 (the MOUT training area), which includes a mock city training area currently used for tactical training of military, federal, and local law enforcement and emergency services providers, and a portion of Barloy Canyon Road located along the eastern boundary of the historical impact area. The MRA also includes a portion of Barloy Canyon Road located outside of a MRS boundary.

Historical records and recovered MEC and MD indicate that the MOUT training area (MRS-28) was used for infantry training in an urban setting in addition to hand grenade training, firing point for rocket launcher training, hand-to-hand combat, combat pistol training, assault course, squad tactics, and night defense training. The Barloy Canyon Road portion of the MRA was maintained as a road and the overlapping MRS-270 was used for bivouac, troop maneuvers, and subcaliber artillery training. The visual surface removal and field verification survey conducted in the MOUT Site MRA were designed to address MEC on the ground surface. Grid sampling investigations were also conducted in a small percentage of the MRA. Following an accidental fire in the area, a visual surface TCRA was conducted over the majority of the MOUT Site MRA.

The MOUT Site MRA is designated for school/university reuse in the Base Reuse Plan (FORA, 1997). The MOUT training area is designated as a training facility for tactical/law enforcement training and emergency service provider training by MPC. The roadway parcel, which includes a portion of Barloy Canyon Road, will continue to be used as a roadway.

The following four remedial alternatives were developed and evaluated in the Group 3 RI/FS Report (ESCA RP Team, 2012) to address the risk from MEC for the future land users.

- Alternative 1: No Further Action
- Alternative 2: Land Use Controls;
- Alternative 3: Additional Subsurface MEC Remediation; and
- Alternative 4: Additional Subsurface MEC Remediation in Selected Areas of the MRAs and Land Use Controls.

Removal of MEC has been conducted in the property consistent with the current and future uses. Alternative 2 (LUCs) included (1) munitions recognition and safety training for people involved in intrusive activities; (2) construction support by UXO-qualified personnel during intrusive activities; and (3) restriction prohibiting residential use.

Alternative 2 was identified as the preferred alternative because it would be protective of human health for the future land users, and would be effective in the short- and long-term at mitigating the risk to future workers conducting intrusive activities from potentially remaining MEC. This remedial alternative would require a low level of effort to implement, a moderate level of effort to administer over time, and would be cost effective. No ARARs were identified for this alternative; however, LUCs would be implemented in a manner consistent with Federal and State guidance (ESCA RP Team, 2012).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan: Remedial Action is Proposed for Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Group 3 Remedial Investigation/Feasibility Study, Former Fort Ord, Monterey County, California* (Army, 2013). A 30-day public comment period was held from January 15, 2013 to February 13, 2013. The Army also held a public meeting on January 30, 2013. The public comments were considered prior to remedy selection.

Remedial Alternative 2 (LUCs) was selected as the remedy to address MEC risks at the Group 3 MRAs. The selected remedy for the Group 3 MRAs includes LUCs because detection technologies may not detect all MEC present. The LUCs include requirements for:

- (1) munitions recognition and safety training for those people that conduct ground-disturbing or intrusive activities on the property;
- (2) construction support by UXO-qualified personnel for ground-disturbing or intrusive activities; and
- (3) restrictions prohibiting residential use.

For the purpose of this decision document, residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12 (Army, 2007). Any proposal for residential development in the Group 3 MRAs will be subject to regulatory agency and Army review and approval; however, per Fort Ord Base Reuse Plan (FORA, 1997), no residential reuse is planned for the Group 3 MRAs. The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as the owner of the real estate or as a government entity.

The ESCA Group 3 ROD provided that, while the Army did not consider California laws and regulations concerning CRUPs to be potential ARARs, the Army had entered into CRUPs with the DTSC at the time the property was transferred to FORA. The DTSC would modify the existing CRUPs, if appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagreed with the Army's determination that California laws and regulations concerning CRUPs were not potential ARARs, they agreed to disagree on this issue since the Army had executed the CRUPs and the DTSC would modify the CRUPs, if appropriate, to be consistent with the identified remedy. After the completion of the implementation of the remedy, DTSC modified the CRUPs to make them consistent with the selected remedy. Following this CRUP modification process it became unnecessary for the Army to continue to participate the CRUP process. The remedial land use restrictions are recorded in deeds to the property.

LUCs will be maintained until EPA and DTSC concur that the land use may be conducted in a manner protective of human health and the environment without the LUCs. This concurrence may be based on: (1) new information (e.g., limited geophysical mapping, site development); or (2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and any MEC encountered during such activities is removed.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA assumes full responsibility for completion of necessary CERCLA response actions (except Army Obligations) which include implementing, maintaining, reporting, and enforcing the land use controls.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Group 3 MRAs.

The remedial action objective developed for the protection of human health and the environment for the Group 3 MRAs is to prevent or reduce the potential for the Group 3 MRA reuse receptors to come in direct contact with MEC items potentially remaining in subsurface soil.

Response Actions

Final Group 3 Land Use Controls Implementation Plan/Operation and Maintenance Plan, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, Monterey County, California (Group 3 LUCIP/OMP) was issued by FORA in September 2018 (ESCA RP Team, 2018). The purpose of the Group 3 LUCIP/OMP is to provide information on how the remedy selected in the Group 3 ROD (Army, 2014) will be implemented and maintained. The Group 3 LUCIP/OMP presents the LUC objectives as described in the ROD and describes remedy implementation actions to be performed in accordance with the ROD to ensure the LUC objectives are met.

In a letter dated September 27, 2018, EPA determined that all remedial actions have been implemented and completed at the Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site MRAs (EPA, 2018).

Cleanup Levels

Subsurface MEC removal had been completed at the Group 3 MRAs prior to the development of the RI/FS. The completed actions support the designated reuses of the underlying properties.

Operations and Maintenance

The LUCIP/OMP annual inspections and record review results will be summarized by FORA in an annual LUC status report using a letter report format. MPC, the County, and the Cities have agreed to conduct annual LUC reporting upon property transfer as established in the executed MOA with DTSC and State CRUPs. The existing "MOA with DTSC Annual LUC Report Outline" was expanded to fulfill the requirements of the LUCIP/OMP. Annual LUC monitoring reports cover the period from July 1 to June 30 of each year. FORA or the County of Monterey compiles the annual LUC monitoring reports from individual jurisdictions and submits them to the Army, EPA, and DTSC. The annual LUC status reports are provided to the Army for inclusion in the five-year reviews.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be implemented.

As part of the early transfer of the subject property, the Army entered into State CRUPs with the DTSC that documented land use restrictions. After the completion of the implementation of the remedy, in December 2019 DTSC modified the CRUPs to make them consistent with the selected remedy.

The existing deeds to FORA for the Group 3 MRA parcels include the following land use restrictions: (1) residential use restriction; and (2) excavation restrictions (unless construction support and MEC recognition and safety training are provided). The Army will modify the existing land use restrictions in the federal deeds, as necessary, to reflect the selected remedy.

The deeds and CRUPs have been recorded with Monterey County.

Statement of Action Complete

Removal of MEC has been conducted in the property, which supports the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the ESCA Group 3 ROD for the Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site MRAs have been implemented. No further action for munitions response is appropriate.

Document References

- ESCA RP Team, 2012. *Final Group 3 Remedial Investigation/Feasibility Study, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, Monterey County, California*. July 31. AR# ESCA-0249B
- ESCA RP Team, 2018. *Final Group 3 Land Use Controls Implementation Plan/Operation and Maintenance Plan, Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, Monterey County, California*. September 21. AR# ESCA-0301B
- FORA, 1997. *Fort Ord Base Reuse Plan*.
- Army, 2013. *Superfund Proposed Plan: Remedial Action is Proposed for Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Group 3 Remedial Investigation/Feasibility Study, Former Fort Ord, Monterey County, California*. January 11. AR# ESCA-0265
- Army, 2014. *Record of Decision, Group 3 Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site Munitions Response Areas, Former Fort Ord, California*. November 25. AR# ESCA-0293
- EPA, 2018. *Remedial Action Completion at Interim Action Ranges (IAR), California State University Monterey Bay Off-Campus (Group 2), Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site (Group 3) Munitions Response Areas, Former Fort Ord, Monterey County, California*. September 27. AR# ESCA-0363

ESCA Group 4 ROD

Site Background

Record of Decision, Group 4 Future East Garrison Munitions Response Area, Former Fort Ord, California (Group 4 ROD; Army, 2018) was signed on September 25, 2018.

The Future East Garrison MRA includes sites where MEC were encountered and at which the Army completed munitions responses (munitions removal). The underlying property was transferred to FORA in 2009 as part of the ESCA. FORA completed RIs and developed *Final Group 4 Remedial Investigation/Feasibility Study, Future East Garrison Munitions Response Area, Former Fort Ord, Monterey County, California* (ESCA RP Team, 2017b). The selected remedy is LUCs.

Remedial Investigation and Feasibility Study

The Future East Garrison MRA encompasses approximately 252 acres and fully contains Parcels E11b.6.1, E11b.7.1.1, E11b.8, and L20.19.1.1. The MRA includes all or portions of four MRSs: MRS-11, MRS-23, MRS-42, and MRS-42 EXP. In addition, small arms range fans extended into the northwestern portion of the MRA. The Future East Garrison MRA includes a former Ammunition Supply Point, Rocket Assembly Building, Office, Warehouses and other associated infrastructure.

Initial use of the Future East Garrison MRA began in approximately 1917 when the U.S. government purchased more than 15,000 acres of land and designated it as an artillery range. Based on the Group 4 RI/FS Report, the site appears to have been used for troop training and maneuvers, rifle grenade training, hand grenade training, engineering and demolition operations/training and pre-WWII training.

The Army performed MEC sampling and removal actions from 1997 to 2005 at MRS-11, MRS-23, MRS-42 and MRS-42 EXP. Additional munitions responses as part of the remedial investigation were conducted by FORA. These munitions responses resulted in completion of subsurface MEC removal over the MRA, with exception of areas with no evidence of munitions use, and under existing roadways, structures, paved and asphalt areas, and fences. Underground utility corridors were left in place.

The ESCA RQA Process was conducted at the approximately 57-acre designated future residential reuse area of the Future East Garrison MRA. Based on the results of the evaluation, FORA, in consultation with the EPA and DTSC, determined that approximately 57 acres of the Future East Garrison MRA designated for residential reuse were recommended as acceptable for residential reuse with appropriate institutional controls, such as applicability of the local Digging and Excavation on the Former Fort Ord Ordinance, future construction support related to munitions, and property transfer disclosures. DTSC had released the *Residential Protocol* (DTSC, 2008) that, when successfully implemented and approved by DTSC, would provide a basis to remove a State residential CRUP on munitions response sites. FORA issued *Final Group 4 Residential Protocol Implementation Technical Report, Future East Garrison Munitions Response Area, Former Fort Ord, Monterey County, California* (ESCA RP Team, 2017a) to provide data and conclusions to support the removal of the residential CRUP on the designated residential area.

The following three remedial alternatives were developed and evaluated in the Group 4 RI/FS Report (ESCA RP Team, 2017b) to address the risk from MEC for the future land users.

- Alternative 1: No Further Action

- Alternative 2: Land Use Controls; and
- Alternative 3: Additional Subsurface MEC Remediation.

Subsurface MEC removal was previously conducted in the Group 4 MRA. Alternative 2 (LUCs) included (1) munitions recognition and safety training for people involved in intrusive activities; (2) construction support by UXO-qualified personnel during intrusive activities; (3) access management measures in areas designated for habitat reserve; (4) continuation of the existing residential use restriction in areas designated for non-residential reuse or for habitat reserve; and (5) restrictions against inconsistent uses (applicable to the habitat reserve areas).

Alternative 2 was identified as the preferred alternative because it would be protective of human health for the future land users, and would be effective in the short- and long-term at mitigating the risk to future workers conducting intrusive activities from potentially remaining MEC. This remedial alternative would require a low level of effort to implement, a moderate level of effort to administer over time, and would be cost effective. No ARARs were identified for this alternative; however, LUCs would be implemented in a manner consistent with Federal and State guidance (ESCA RP Team, 2017b).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan: Group 4 Remedial Investigation/Feasibility Study, The Public is Invited to Comment and Attend a Public Meeting on a Proposed Remedial Action for the Future East Garrison Munitions Response Area on the Former Fort Ord* (Army, 2017). A 30-day public comment period was held from October 4, 2017 to November 2, 2017. The Army also held a public meeting on October 19, 2017. The public comments were considered prior to remedy selection.

Remedial Alternative 2 (LUCs) was selected as the remedy to address MEC risks at the Group 4 MRA. The selected remedy for the Future East Garrison MRA includes LUCs because detection technologies may not have detected every military munition present. The LUCs include requirements for:

- (1) military munitions recognition and safety training for workers who will conduct ground-disturbing or intrusive activities;
- (2) construction support to manage the risk associated with the potential presence of military munitions for ground-disturbing or intrusive activities to address MEC that potentially remain in the subsurface;
- (3) access management measures in areas designated for habitat reserve;
- (4) restrictions prohibiting residential use in areas designated for non-residential development reuse or for habitat reserve; and
- (5) restrictions against inconsistent uses (applicable to the habitat reserve areas).

For the purpose of this decision document, residential use includes: single family or multi-family residences; childcare facilities; playgrounds; hospitals; nursing homes or assisted living facilities; and any type of educational facility for children or young adults in grades kindergarten through 12. Any proposal for residential use in the designated non-residential development reuse or habitat reserve portions of the Future East Garrison MRA will be subject to regulatory agency and Army review and approval. The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as the owner of the real estate or as a government entity.

The ESCA Group 4 ROD provided that, while the Army did not consider California laws and regulations concerning CRUPs to be potential ARARs, the Army had entered into a CRUP with the DTSC at the time the property was transferred to FORA. The DTSC would modify the existing CRUP, as appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagreed with the Army's determination that California laws and regulations concerning CRUPs were not potential ARARs, they agreed to disagree on this issue since the Army had executed the CRUP and the DTSC would modify the CRUP, as appropriate, to be consistent with the identified remedy. After the completion of the implementation of the remedy, DTSC modified the CRUP to make it consistent with the selected remedy. Following this CRUP modification process it became unnecessary for the Army to continue to participate the CRUP process. The remedial land use restrictions are recorded in deeds to the property.

Each component of the LUCs will remain in place until EPA and DTSC concur that the site is protective of human health and the environment without the LUC so as to allow for unrestricted use and exposure. This concurrence may be based on: (1) new information (e.g., limited geophysical mapping, site development); or (2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and military munitions encountered during such activities is removed.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA assumes full responsibility for completion of necessary CERCLA response actions (except Army Obligations) which include implementing, maintaining, reporting, and enforcing the land use controls.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Group 4 MRA.

The RAO developed for the protection of human health and the environment for the Future East Garrison MRA is to prevent or reduce the potential for the Future East Garrison MRA reuse receptors to come in direct contact with MEC or other munitions potentially remaining in subsurface and minimize potential impacts from such exposures.

Response Actions

Final Group 4 Land Use Controls Implementation Plan/Operation and Maintenance Plan, Future East Garrison MRA, Former Fort Ord, Monterey County, California (Group 4 LUCIP/OMP) was issued by FORA in February 2019 (ESCA RP Team, 2019). The purpose of the Group 4 LUCIP/OMP is to provide information on how the remedy selected in the Group 4 ROD (Army, 2018) will be implemented and maintained. The Group 4 LUCIP/OMP presents the LUC objectives as described in the ROD and describes remedy implementation actions to be performed in accordance with the ROD to ensure the LUC objectives are met.

In a letter dated February 28, 2019, EPA determined that all remedial actions have been implemented and completed at the Future East Garrison MRA (EPA, 2019).

Cleanup Levels

Subsurface MEC removal had been completed at the Group 4 MRA prior to the development of the RI/FS. Additional work in the form of Residential Quality Assurance was implemented in future residential reuse areas.

Operations and Maintenance

The LUCIP/OMP annual inspections and record review results will be summarized by FORA in an annual LUC status report using a letter report format. MPC and the County have agreed to conduct annual LUC reporting upon property transfer as established in the executed MOA with DTSC and State CRUPs. The existing “MOA with DTSC Annual LUC Report Outline” was expanded to fulfill the requirements of the LUCIP/OMP. Annual LUC monitoring reports cover the period from July 1 to June 30 of each year. FORA or the County of Monterey compiles the annual LUC monitoring reports from individual jurisdictions and submits them to the Army, EPA, and DTSC. The annual LUC status reports are provided to the Army for inclusion in the five-year reviews.

As part of the LUC implementation strategy, long-term management measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be implemented.

As part of the early transfer of the subject property, the Army entered into a State CRUP with the DTSC that documented land use restrictions. After the completion of the implementation of the remedy, in December 2019 DTSC modified the CRUP to make it consistent with the selected remedy.

The existing deed to FORA for the Future East Garrison MRA parcels includes the following land use restrictions: (1) residential use restriction; and (2) excavation restrictions (unless construction support and military munitions recognition and safety training are provided). The Army will modify the existing land use restrictions in the federal deed, as necessary, to reflect the selected remedy.

The deeds and CRUP have been recorded with Monterey County.

Statement of Action Complete

Removal of MEC has been conducted in the property, which supports the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the ESCA Group 4 ROD for the Future East Garrison MRA have been implemented. No further action for munitions response is appropriate.

Document References

- ESCA RP Team, 2017a. *Final Group 4 Residential Protocol Implementation Technical Report, Future East Garrison Munitions Response Area, Former Fort Ord, Monterey County, California*. June 15. AR# ESCA-0326B
- ESCA RP Team, 2017b. *Final Group 4 Remedial Investigation/Feasibility Study, Future East Garrison Munitions Response Area, Former Fort Ord, Monterey County, California*. June 21. AR# ESCA-0322B
- ESCA RP Team, 2019. *Final Group 4 Land Use Controls Implementation Plan/Operation and Maintenance Plan, Future East Garrison Munitions Response Area, Former Fort Ord, Monterey County, California*. February 22. AR# ESCA-0364B
- Army, 2017. *Superfund Proposed Plan: Group 4 Remedial Investigation/Feasibility Study, The Public is Invited to Comment and Attend a Public Meeting on a Proposed Remedial Action for the Future East Garrison Munitions Response Area on the Former Fort Ord*. September 28. AR# ESCA-0345
- Army, 2018. *Record of Decision, Group 4 Future East Garrison Munitions Response Area, Former Fort Ord, California*. September 25. AR# ESCA-0360

- EPA, 2019. *Remedial Action Completion at Group 1 - Seaside and Parker Flats (Phase II) and Group 4 - Future East Garrison Munitions Response Areas, Former Fort Ord, Monterey County, California*. February 28. AR# ESCA-0370

ESCA Interim Action Ranges MRA ROD

Site Background

Record of Decision, Interim Action Ranges Munitions Response Area, Former Fort Ord, California (Army, 2017) was signed on January 18, 2017. The ESCA Interim Action Ranges MRA ROD addresses approximately 227 acres within the Ranges 43-48 Interim Action site that was transferred to FORA under the ESCA. Under the ESCA, FORA completed the response actions. The underlying property was transferred to FORA in 2009 as part of the ESCA. FORA developed *Final Focused Feasibility Study, Interim Action Ranges Munitions Response Area (IA Ranges MRA FFS; ESCA RP Team, 2015)*. The selected remedy is LUCs.

Of the Interim Action Ranges MRA, Parcel E40 is designated for nonresidential development reuse. The remainder of the area (Parcels E38, E39, E41 and E42) is designated as habitat reserve.

Remedial Investigation and Feasibility Study

The ESCA Interim Action Ranges MRA is located within the northern portion of MRS-Ranges 43-48, where MEC removal was conducted in 2003-2005 as an interim remedial action based on *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, California* (Army, 2002). As part of that action subsurface MEC removal was completed with the exception of special case areas (SCAs) and non-completed areas (NCAs). The northern portion was transferred to FORA in 2009 as part of the ESCA. Subsequently 40mm high explosive projectiles were found on the ground surface in the Range 47 SCA and Range 44 SCA. The discovery of these projectiles indicated a potential for munitions containing sensitive fuzes to remain within the Range 44 and Range 47 SCAs. Therefore, the IA Ranges MRA was evaluated for additional interim actions necessary to meet the objectives of the 2002 Interim Action MR ROD and support a final remedial action decision for the area.

A Design Study and resulting additional remedial actions, referred to by FORA as the “Phase II Interim Action,” at the Interim Action Ranges MRA were completed from February 2011 through March 2013. Approximately 36 acres of SCAs and approximately 9 acres of NCAs within MRS-Ranges 43-48 are located within the boundaries of the Interim Action Ranges MRA. FORA completed the Design Study in Range 44 SCA, Range 47 SCA, and Central Area NCAs, and the interim remedial action in Range 47 SCA. Two additional SCAs (Range 45 Trench SCA and a small portion of the Fenceline SCA) are also located within the Interim Action Ranges MRA; however, these areas did not require any additional MEC removal as part of the Phase II Interim Action.

Other than the Range 45 Trench SCA, subsurface removal had been completed within the designated development parcel (Parcel E40).

The results and findings from the Design Study and Phase II Interim Action were included in the *Final Focused Feasibility Study, Interim Action Ranges Munitions Response Area (IA Ranges MRA FFS; ESCA RP Team, 2015)* to support the final remedial action decision-making process. The following remedial alternatives were evaluated to address the risk from MEC for the future land users.

- Alternative 1: No Further Action
- Alternative 2: Land Use Controls; and
- Alternative 3: Additional Subsurface MEC Remediation.

Removal of MEC has been conducted in the property consistent with the future uses. Alternative 2 (LUCs) included (1) munitions recognition and safety training for people involved in intrusive activities; (2) construction support by UXO-qualified personnel during intrusive activities; and (3) restriction prohibiting residential use.

Alternative 2 was identified as the preferred alternative because it would be protective of human health for the future land users, and would be effective in the short- and long-term at mitigating the risk to future workers conducting intrusive activities from potentially remaining MEC. This remedial alternative would require a low level of effort to implement, a moderate level of effort to administer over time, and would be cost effective. No ARARs were identified for this alternative; however, LUCs would be implemented in a manner consistent with Federal and State guidance (ESCA RP Team, 2015).

Selected Remedy and Decision Documents

The remedial alternatives were presented in *Superfund Proposed Plan: Remedial Action is Proposed for Interim Action Ranges Munitions Response Area, Focused Feasibility Study, Former Fort Ord, Monterey County, California* (Army, 2016). A 30-day public comment period was held from March 16, 2016 to April 14, 2016. The Army also held a public meeting on March 30, 2016. The public comments were considered prior to remedy selection.

Remedial Alternative 2 (LUCs) was selected as the remedy for the IA Ranges MRA. The LUCs include requirements for:

- (1) munitions recognition and safety training for people that will conduct ground-disturbing or intrusive activities,
- (2) construction support for ground-disturbing or intrusive activities to address MEC that potentially remains in the subsurface, and
- (3) restrictions prohibiting residential use.

For the purpose of this decision document, residential use includes, but is not limited to: single family or multi-family residences; childcare facilities; playgrounds; hospitals; nursing homes or assisted living facilities; and any type of educational purpose for children or young adults in grades kindergarten through 12. Any proposal for residential use in the Interim Action Ranges MRA will be subject to regulatory agency and Army review and approval. The selected remedy will be implemented by FORA in its capacity as Grantee under the ESCA and as a party to the AOC and not in its capacity as the owner of the real estate or as a government entity.

The ESCA Interim Action Ranges MRA ROD provided that, while the Army did not consider California laws and regulations concerning CRUPs to be potential ARARs, the Army had entered into a CRUP with the DTSC at the time the property was transferred to FORA. The DTSC would modify the existing CRUP, as appropriate, to reflect the land use restrictions included in the selected remedy. Although the DTSC and the EPA Region IX disagreed with the Army's determination that California laws and regulations concerning CRUPs were not potential ARARs, they agreed to disagree on this issue since the Army had executed the CRUP and the DTSC would modify the CRUP, as appropriate, to be consistent with the identified remedy. After the completion of the implementation of the remedy, DTSC modified the CRUP to make it consistent with the selected remedy. Following this CRUP modification process it became unnecessary for the Army to continue to participate the CRUP process. The remedial land use restrictions are recorded in deeds to the property.

The LUCs restricting land use and requiring construction support and MEC recognition and safety training for intrusive or ground-disturbing activities shall remain in place until EPA and DTSC concur that the site is protective of human health and the environment. This concurrence may be based on: (1) new information (e.g., limited geophysical mapping, site development); or (2) where the depth of soil disturbance related to ground-disturbing or intrusive activities is sufficient to address the uncertainty of MEC remaining in the subsurface and military munitions encountered during such activities is removed.

Pursuant to the ESCA, the AOC and the FFA Amendment No.1, FORA assumes full responsibility for completion of necessary CERCLA response actions (except Army Obligations) which include implementing, maintaining, reporting, and enforcing the land use controls.

As part of the LUC implementation strategy, Long Term Management Measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be included for the land use areas within the Interim Action Ranges MRA.

The remedial action objective developed for the protection of human health and the environment for the Interim Action Ranges MRAs is to prevent or reduce the potential for the Interim Action Ranges MRA reuse receptors to come in direct contact with MEC items potentially remaining in subsurface soil and minimize impacts from such exposures.

Response Actions

Final Land Use Controls Implementation Plan/Operation and Maintenance Plan, Interim Action Ranges MRA, Former Fort Ord, Monterey County, California (IAR MRA LUCIP/OMP) was issued by FORA in August 2018 (ESCA RP Team, 2018). The purpose of the IAR MRA LUCIP/OMP is to provide information on how the remedy selected in the IAR MRA ROD (Army, 2017) will be implemented and maintained. The IAR MRA LUCIP/OMP presents the LUC objectives as described in the ROD and describes remedy implementation actions to be performed in accordance with the ROD to ensure the LUC objectives are met.

In a letter dated September 27, 2018, EPA determined that all remedial actions have been implemented and completed at the Interim Action Ranges MRA (EPA, 2018).

Cleanup Levels

Subsurface MEC removal had been completed at the IAR MRA prior to the development of the Focused FS. The completed actions support the designated uses of the underlying property.

Operations and Maintenance

The LUCIP/OMP annual inspections and record review results will be summarized by FORA in an annual LUC status report using a letter report format. MPC has agreed to conduct annual LUC reporting upon property transfer as established in the executed MOA with DTSC and State CRUP. The existing "MOA with DTSC Annual LUC Report Outline" was expanded to fulfill the requirements of the LUCIP/OMP. Annual LUC monitoring reports cover the period from July 1 to June 30 of each year. FORA or the County of Monterey compiles the annual LUC monitoring reports from individual jurisdictions and submits them to the Army, EPA, and DTSC. The annual LUC status reports are provided to the Army for inclusion in the five-year reviews.

As part of the LUC implementation strategy, long-term management measures comprised of a deed notice and restrictions, annual monitoring and reporting, and five-year review reporting will be implemented.

As part of the early transfer of the subject property, the Army entered into a State CRUP with the DTSC that documented land use restrictions. After the completion of the implementation of the remedy, in December 2019 DTSC modified the CRUP to make it consistent with the selected remedy.

The existing deed to FORA for the Interim Action Ranges MRA parcels includes the following land use restrictions: (1) prohibition on residential use; and (2) prohibition on excavation (unless construction support and munitions recognition and safety training, referred to as “MEC recognition and safety training” in the State CRUP, are provided). The Army will modify the existing land use restrictions in the federal deed, as necessary, to reflect the selected remedy.

The deeds and CRUP have been recorded with Monterey County.

Statement of Action Complete

Removal of MEC has been conducted in the property that support the designated future uses described in the Fort Ord Base Reuse Plan. All response actions required by the ESCA Interim Action Ranges MRA ROD have been implemented. No further action for munitions response is appropriate.

Document References

- ESCA RP Team, 2015. *Final Interim Action Ranges MRA Focused Feasibility Study, Former Fort Ord, Monterey County, California*. October 23. AR# ESCA-0310A
- ESCA RP Team, 2018. *Final Land Use Controls Implementation Plan/Operation and Maintenance Plan, Interim Action Ranges Munitions Response Area, Former Fort Ord, Monterey County, California*. August 8. AR# ESCA-0337B
- Army, 2002. *Record of Decision, Interim Action for Ordnance and Explosives at Ranges 43-48, Range 30A, and Site OE-16, Former Fort Ord, California*. September 26, 2002. AR# OE-0414
- Army, 2016. *Superfund Proposed Plan: Remedial Action is Proposed for Interim Action Ranges Munitions Response Area, Focused Feasibility Study, Former Fort Ord, Monterey County, California*. March 14. AR# ESCA-0323
- Army, 2017. *Record of Decision, Interim Action Ranges Munitions Response Area, Former Fort Ord, California*. January 18. AR# ESCA-0331
- EPA, 2018. *Remedial Action Completion at Interim Action Ranges (IAR), California State University Monterey Bay Off-Campus (Group 2), Del Rey Oaks/Monterey, Laguna Seca Parking, and Military Operations in Urban Terrain Site (Group 3) Munitions Response Areas, Former Fort Ord, Monterey County, California*. September 27. AR# ESCA-0363

6. Five-Year Review History

The Army completed Five-Year Reviews of all in-place cleanup remedies for the Fort Ord Superfund Site in 2002, 2007, 2012, and 2017 as listed below. The initial triggering action for this statutory review is the start of the RA at the OU 2 Landfills on May 17, 1997. The next five-year review will occur in 2022.

- *Draft Final Five-Year Review Report, First Five-Year Review Report for Fort Ord Superfund Site, Monterey, California* (Army, 2002b);
- *Final Second Five-Year Review Report, Fort Ord Superfund Site, Monterey, California* (Army, 2007b);
- *Final 3rd Five-Year Review Report for Fort Ord Superfund Site, Monterey County, California* (Army, 2012); and
- *Final 4th Five-Year Review Report for Fort Ord Superfund Site, Monterey County, California* (Army, 2017c).

The 4th Five-Year Review Report included a summary table of HTW sites for which Five-Year Reviews had been discontinued. This table is presented as in Appendix B. Sites where hazardous substances, pollutants, or contaminants remain above levels that allow for unlimited use and unrestricted exposure remain in the program to be evaluated in future Five-Year Reviews.

The Five-Year Review Summary Form from the 4th Five-Year Review Report (Army, 2017c) is provided at Appendix B. No issues were identified for the sites evaluated in the 4th Five-Year Review and included in the partial deletion, and the remedies were deemed protective of human health and the environment.

Progress since the 4th Five-Year Review is summarized below:

- Site 2 and Site 12: The remedy is protective. The remedial activities completed to date (at the time of the 4th Five-Year Review) have adequately addressed all exposure pathways that could result in unacceptable risks in these areas. The soil-gas rebound study is ongoing.
- Site 39: The remedy is protective. The overall remedy is protective of human health and the environment. The 3rd Five-Year Review Report recommended an evaluation of the protectiveness for 17 lead-impacted sites at the former Fort Ord based on a 2007 change in a state benchmark health guidance value. A technical evaluation was performed in 2017 to evaluate the protectiveness at these sites. While all 17 lead-impacted sites were found to be protective, the long-term protectiveness at sites HA-18D and HA-23D for potential future residential development was being further evaluated (at the time of the 4th Five-Year Review). The final lead evaluation is documented in *Technical Memorandum, Evaluation of Lead Concentrations at Selected Sites, Former Fort Ord, California* (KEMRON, 2019).
- OUCTP: At the time of the 4th Five-Year Review, the remedy at OUCTP was expected to be protective of human health and the environment upon completion. The groundwater remedy has since been determined to be in place and operating as described in *Final Operable Unit Carbon Tetrachloride Plume Fourth Quarter 2017 through Third Quarter 2018 Groundwater Monitoring Report, Former Fort Ord, California* (Ahtna, 2019).

- Early Transfer Property. At the time of the 4th Five-Year Review, the remedy selection process was not complete for the ESCA Group 1 and Group 4 MRAs. The remedy selection process for the Early Transfer Property was completed in September 2018. FORA has completed the initial implementation of the selected remedies (LUCs). EPA certified the completion of the remedial actions in February 2019. Further, on the basis of *Site-Wide Remedial Action Completion Report, FORA Environmental Services Cooperative Agreement (ESCA) Remediation Program, Former Fort Ord, California* (FORA, 2020), on April 14, 2020, EPA determined that the remedial action has been completed site-wide in accordance with the AOC (EPA, 2020).

The next Five-Year Review is scheduled to be completed by September 2022.

7. Community Involvement

The Army is authorized and responsible to conduct community relations activities as part of the environmental cleanup of the former Fort Ord. The overall goal of the Fort Ord Community Relations Program is to promote two-way communications between community members and the Fort Ord BCT. Over the years, the community relations plan has been updated as the cleanup projects progressed and community interests evolved. The community relations activities are currently guided by *Final Community Relations Plan Updated Number 4, Former Fort Ord, California* (Army, 2013). The community relations program described in this plan is informed by community member interests and concerns. The Army conducts community surveys every two years. Based on community input, regulatory requirements, and applicable guidance, the community relations program includes:

- Providing tours, Community Involvement Workshops, Technical Review Committee meetings, and presentations to local community organizations;
- Providing safety and human health alerts;
- Sustaining community member participation in the cleanup process;
- Maintaining the established Administrative Record and Information Repositories that house documents for the environmental cleanup program;
- Managing an environmental cleanup web site, and distributing of the Annual Report, fact sheets, and other community information materials.

Members of the public may review the documents contained in the Administrative Record on-site or on-line. The Administrative Record documents are physically located in the BRAC Office, Building 4463 Gigling Road, Ord Military Community (former Fort Ord). Most Administrative Record documents are also accessible online at fortordcleanup.com using the Administrative Record search tool. The Administrative Record Coordinator is available at 831-393-9693 to assist regulatory agency representatives and public members in locating records.

In addition, the Fort Ord BRAC Office administers the Fort Ord environmental cleanup website (fortordcleanup.com). This public website provides background information, a description of current activities, documents available for public comment, maps, notices, Community Involvement Workshop agendas and summaries, the Administrative Record search tool, and documents and references for further cleanup and environmental information through Army, EPA, DTSC, RWQCB, and related agency websites.

Community involvement activities specifically planned for the partial deletion include:

- A fact sheet explaining the partial deletion and inviting the community to provide comments during the upcoming public comment period.
- A newspaper notice of the upcoming public comment period and how to provide comments.
- A responsiveness summary if warranted.
- A newspaper notice of the completed partial deletion.

8. Determination that the Criteria for Deletion Have Been Met

Parcels identified for partial deletion are listed in Table 2 and shown in Figure 2. The implemented remedies achieve the degree of cleanup or protection specified in the RODs for the deletion parcels. No further CERCLA response is needed for the deletion parcels to protect human health and the environment.

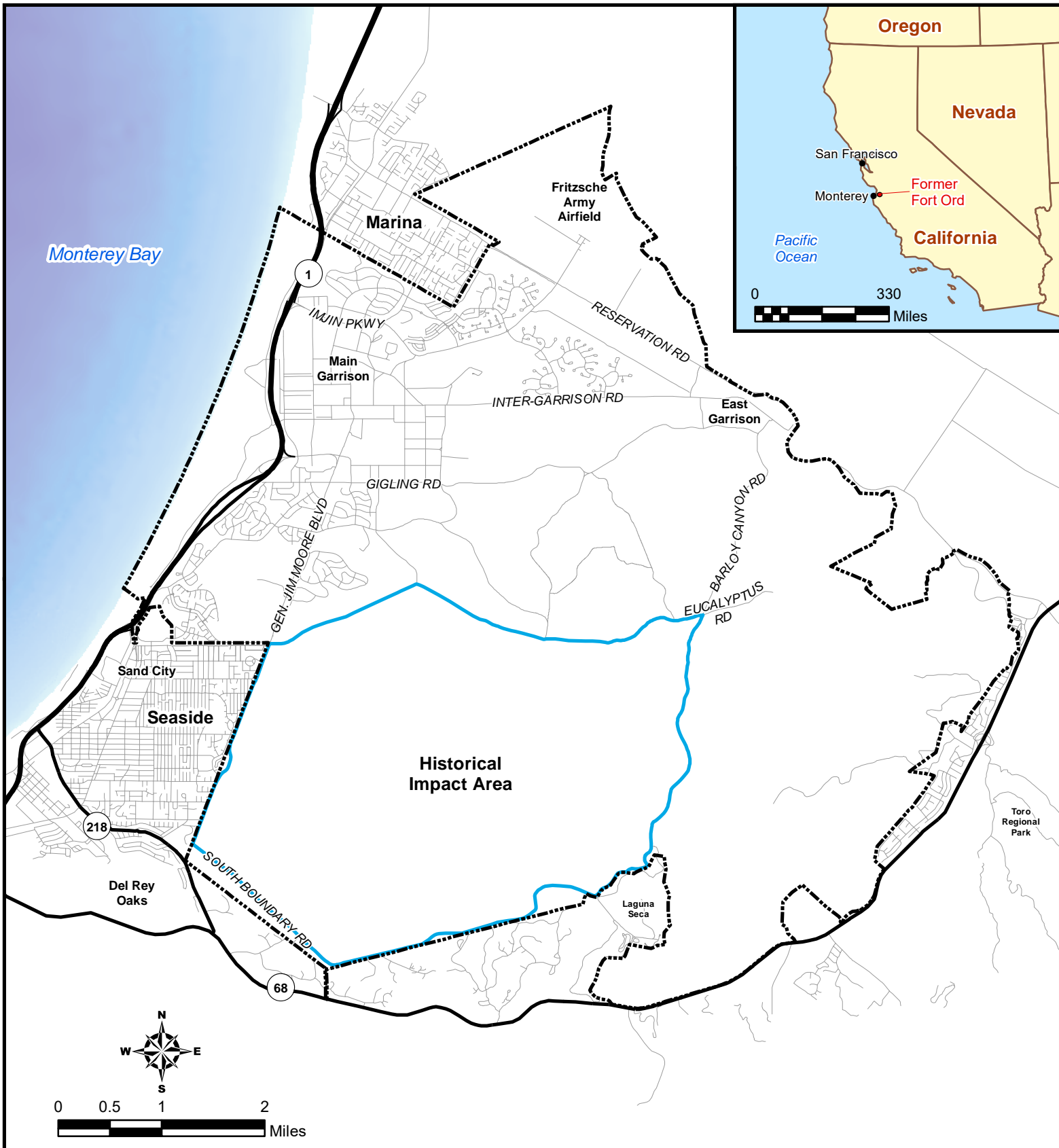
9. Document References

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Figures



Legend

-  Former Fort Ord Boundary
-  Historical Impact Area

SITE LOCATION MAP

Former Fort Ord
Monterey, CA

FILE:
RASR_2019_01.mxd

PRINT DATE:
11/25/2019

DRAWN BY:
AK

Figure 1

DATA SOURCE:
Fort Ord BRAC

**Remedial Action
Summary Report
Fort Ord
Date: 5/15/2020**

LEGEND

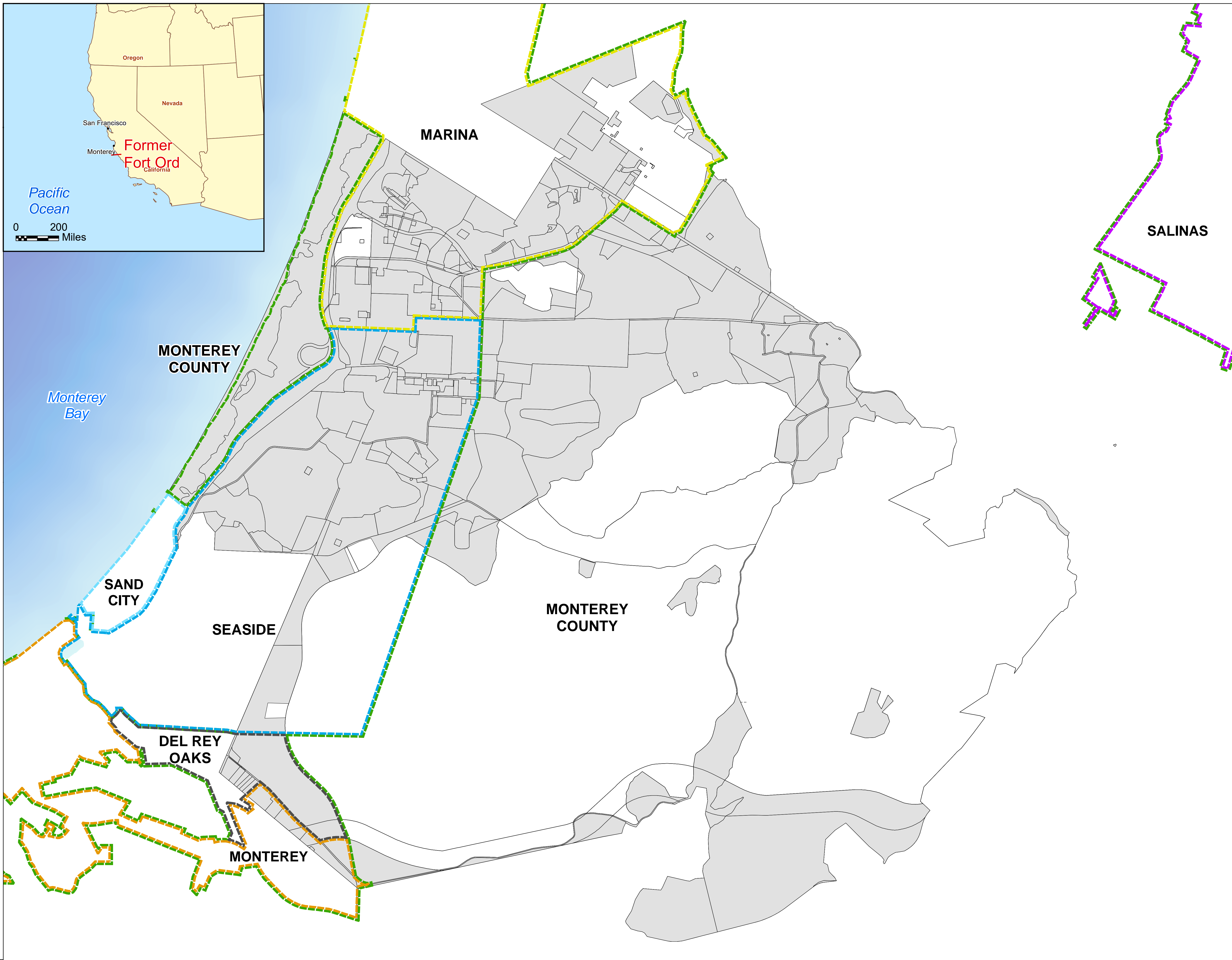
- Army Corps of Engineers Parcels
- NPL Deletion Parcels - 13,394 Acres
- Parcels that Remain on NPL

Fort Ord Jurisdictions

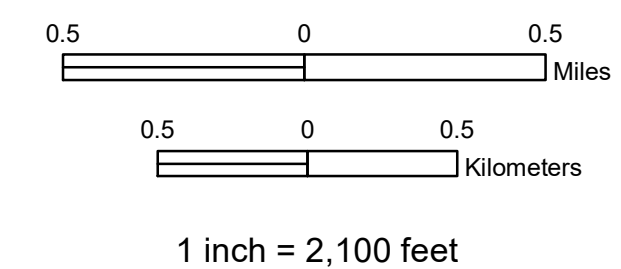
- ▭ DEL REY OAKS
- ▭ MARINA
- ▭ MONTEREY
- ▭ SALINAS
- ▭ SAND CITY
- ▭ SEASIDE
- ▭ MONTEREY COUNTY

NOTES

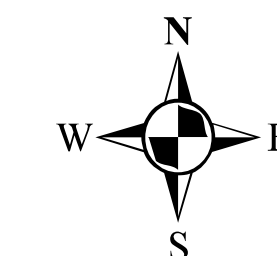
- University jurisdictions are not shown.



**Figure 2
NPL Deletion
Parcels**



U.S. ARMY CORPS
OF ENGINEERS



**FORMER FORT ORD
MONTEREY, CALIFORNIA**

DATA SOURCE: Fort Ord BRAC	PRINT DATE: 5/15/2020
FILE: RASR_2020_2.mxd	DRAWN BY: AK

**Remedial Action
Summary Report
Fort Ord
Date: 5/15/2020**

LEGEND

- Army Corps of Engineers Parcels
- NPL Deletion Parcels - 13,394 Acres

Parcels that Remain on NPL

- OU2 Landfills Parcels - 147 Acres
- Site 39 Habitat Areas and/or Track 3 Impact Area MRA - 6,784 Acres
- HA-18D and HA-23D - 59 Acres
- Includes PFAS Soil Investigation Areas - 660 acres
- Includes Sites 2/12 Soil-Gas Investigation Area - 74 Acres

F1.1.1 - 4,943 Acres

- Track 1 - 4,801 Acres
- BLM Area B B-5 and B-6 - 142 Acres

F1.2 - 1,191 Acres

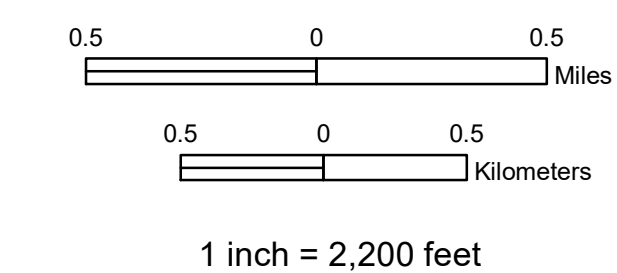
- Track 1 - 464 Acres
- BLM Area B B-3E, B-3E-NE, Unit C, Unit A - 727 Acres

F1.3 - 807 Acres

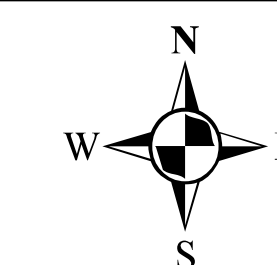
- MRS-16 and BLM Area B B-3W, B-2A, B-2, B-4, Unit B

Figure 2a

NPL Deletion Parcels and Parcels that Remain on NPL

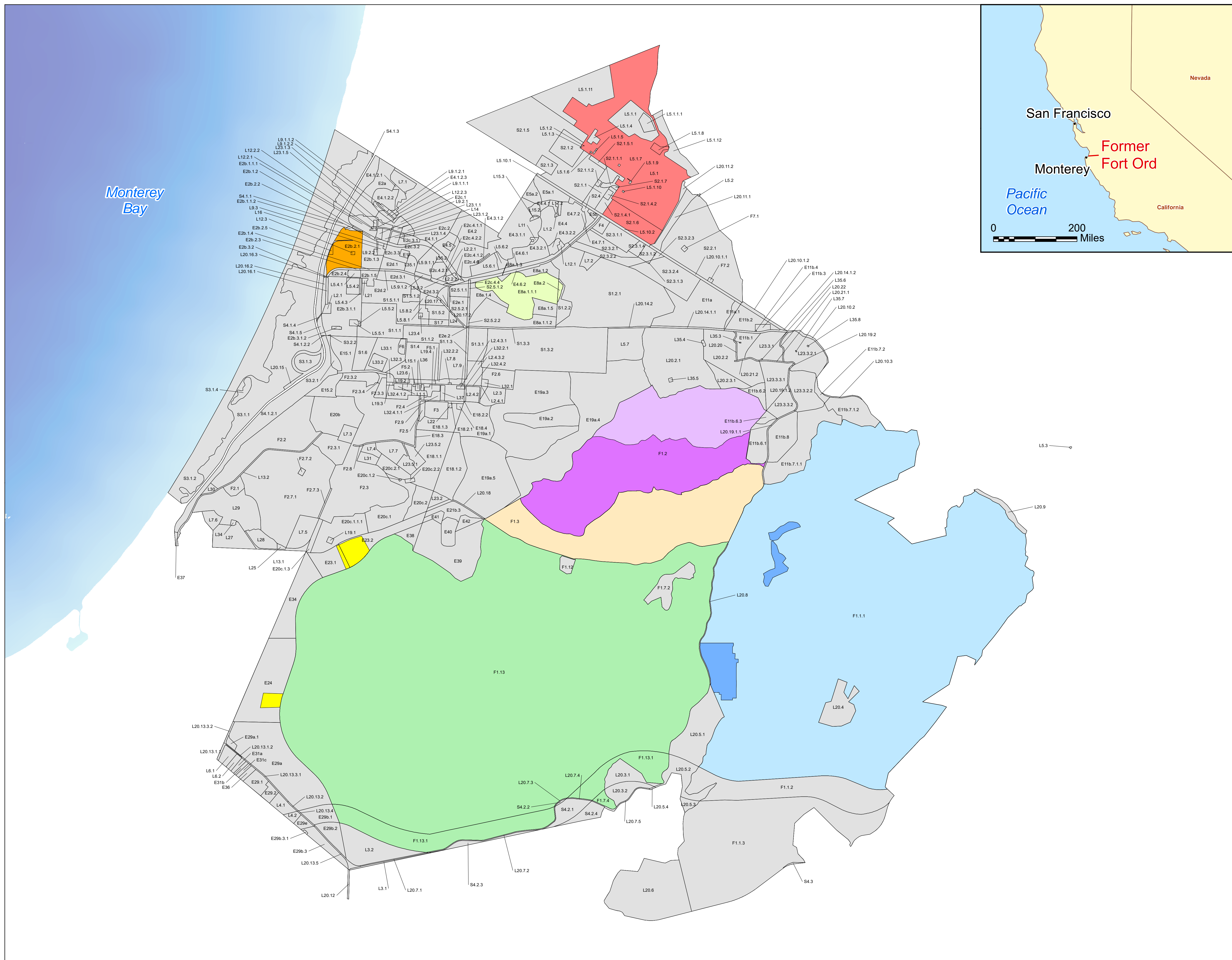


U.S. ARMY CORPS OF ENGINEERS



**FORMER FORT ORD
MONTEREY, CALIFORNIA**

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FILE: RASR_2020_2a.mxd	DRAWN BY: AK

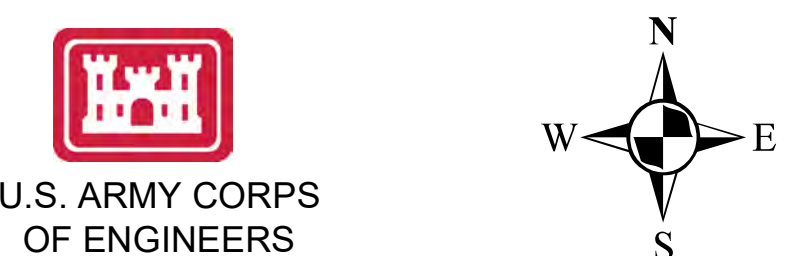
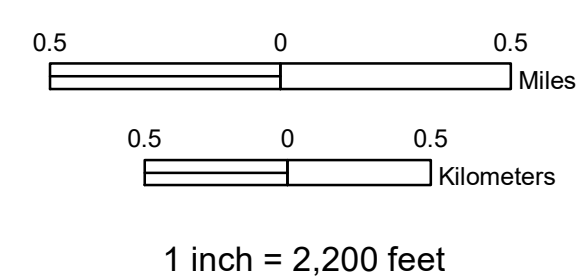


**Remedial Action
Summary Report
Fort Ord
Date: 6/30/2020**

- LEGEND**
- Army Corps of Engineers Parcels
 - NPL Deletion Parcels - 13,394 Acres
 - Parcels that Remain on NPL
 - ▭ HTW Sites Proposed to be Deleted
 - ▭ HTW Sites Not Proposed to be Deleted
 - Site 39 Development Area
 - Historical Areas

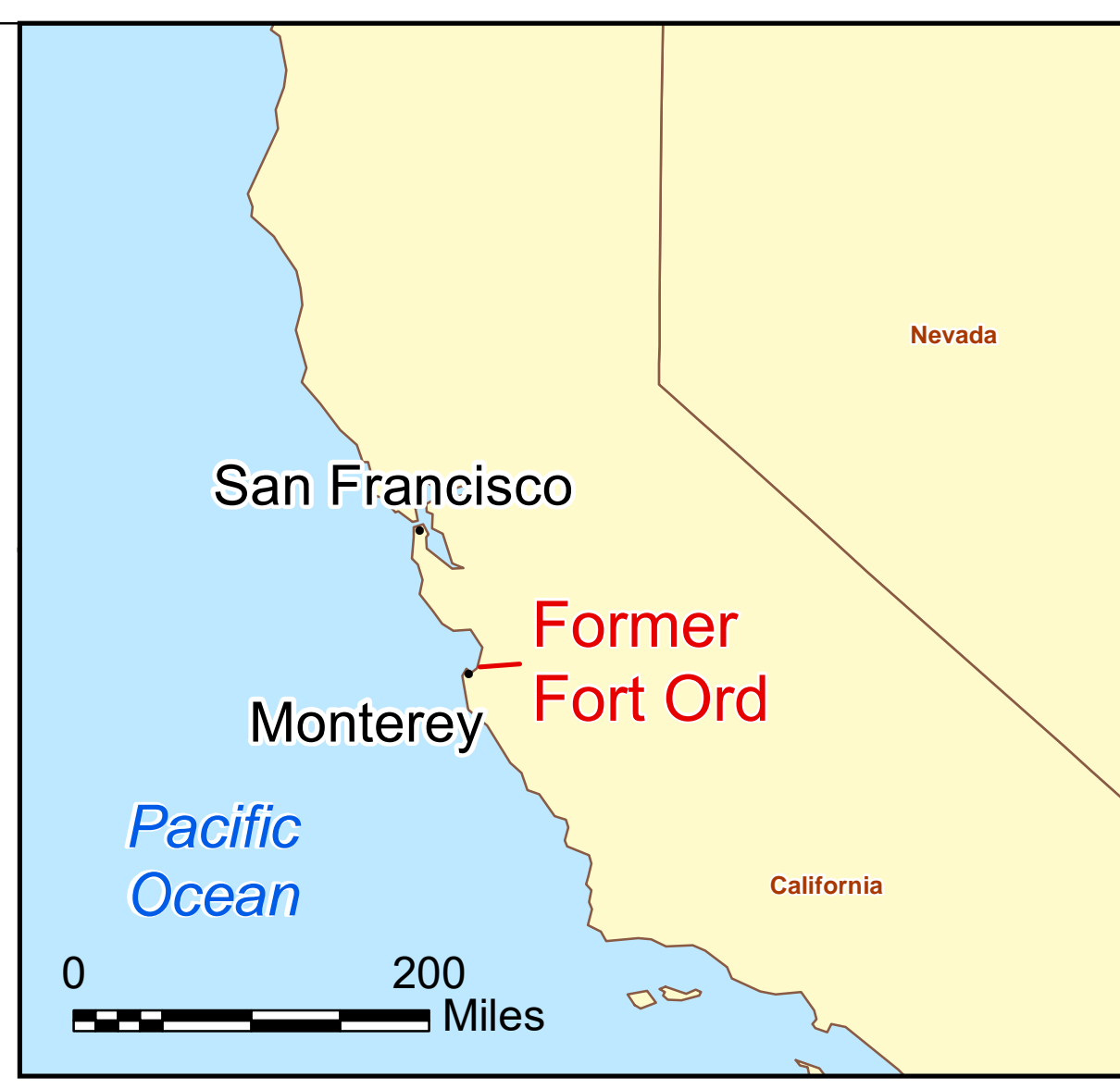
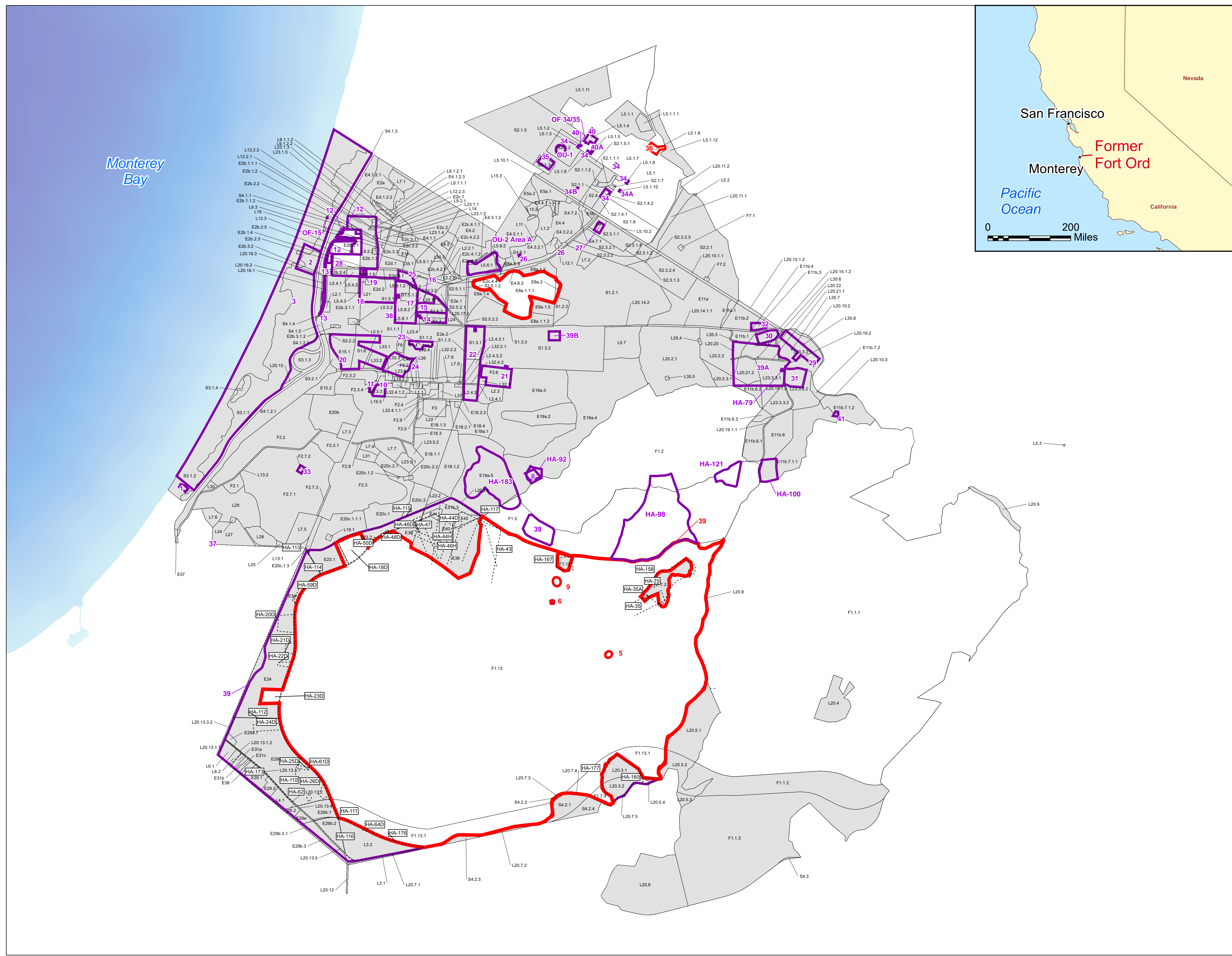
- NOTES**
- Site 4 Beach Stormwater Outfalls comprise of a total of 7 outfall locations in parcels S3.1.1 and S3.1.2. Outfall locations are not shown.
 - Site 39 development parcels are NPL deletion parcels except HA-18D and HA-23D
 - Areas where additional soil sampling is planned as part of PFAS investigation remain on NPL.
 - Sites 2/12: The soil gas investigation area remains on NPL.
 - Groundwater remedies are not being considered for partial deletion at this time. Groundwater plumes are not shown.

**Figure 3
HTW Sites**

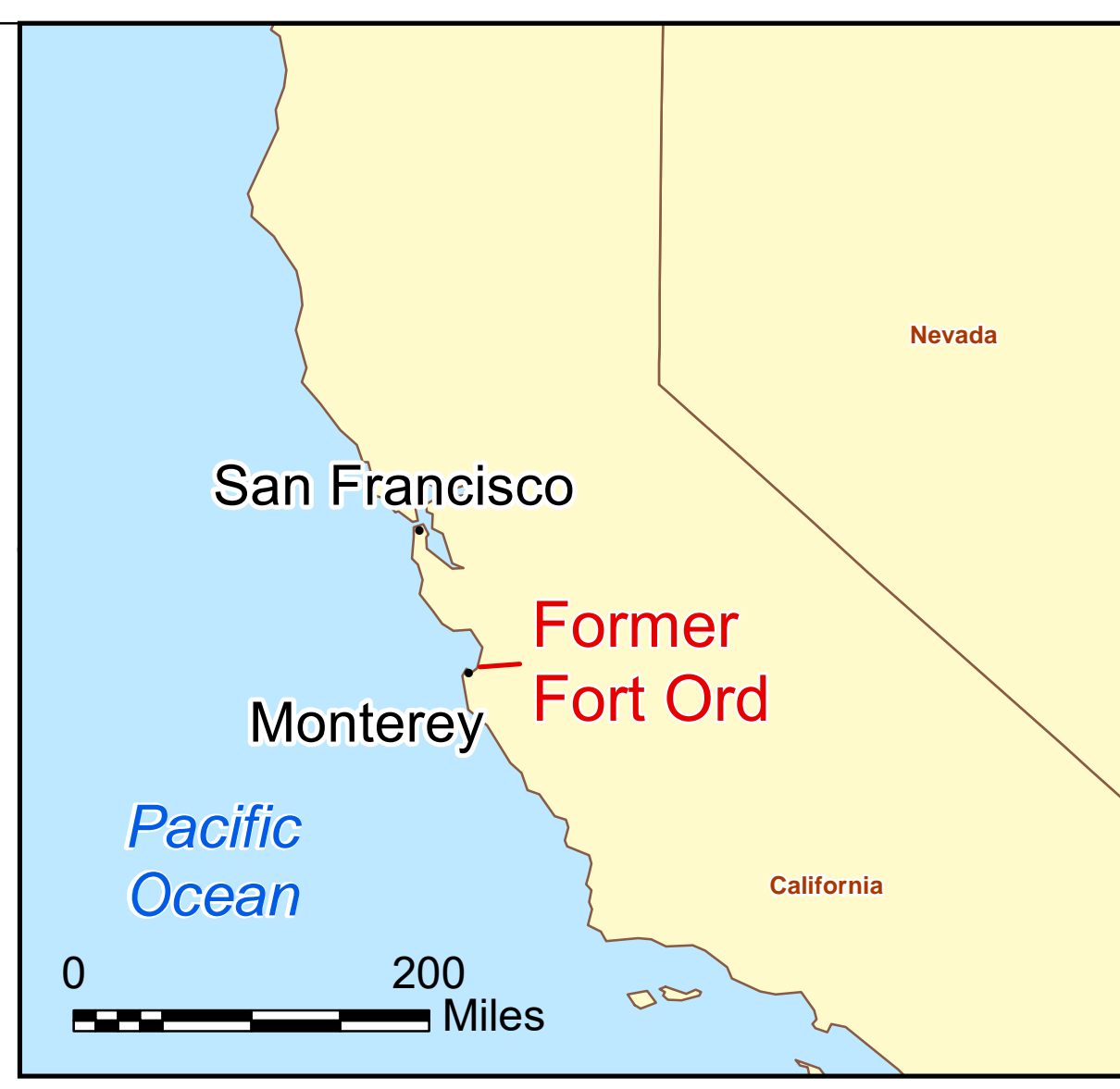


**FORMER FORT ORD
MONTEREY, CALIFORNIA**

DATA SOURCE: Fort Ord BRAC	PRINT DATE: 6/30/2020
FILE: RASR_2020_3.mxd	DRAWN BY: AK



Monterey Bay

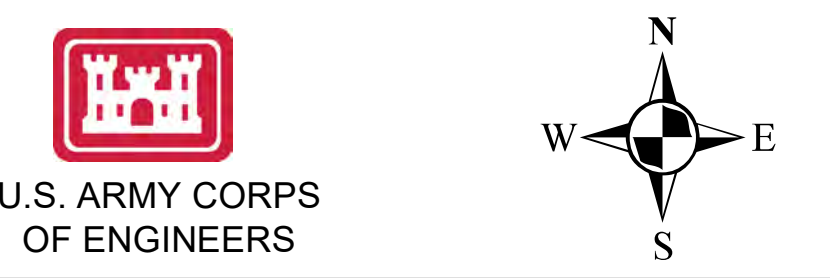
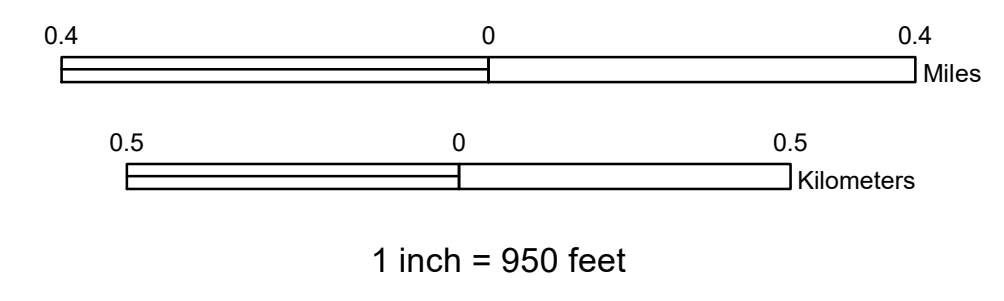


Remedial Action Summary Report Fort Ord Date: 5/8/2020

- LEGEND**
- Army Corps of Engineers Parcels
 - NPL Deletion Parcels - 13,394 Acres
 - Parcels that Remain on NPL
 - ▭ HTW Sites to be Deleted
 - ▭ HTW Sites to Remain on NPL

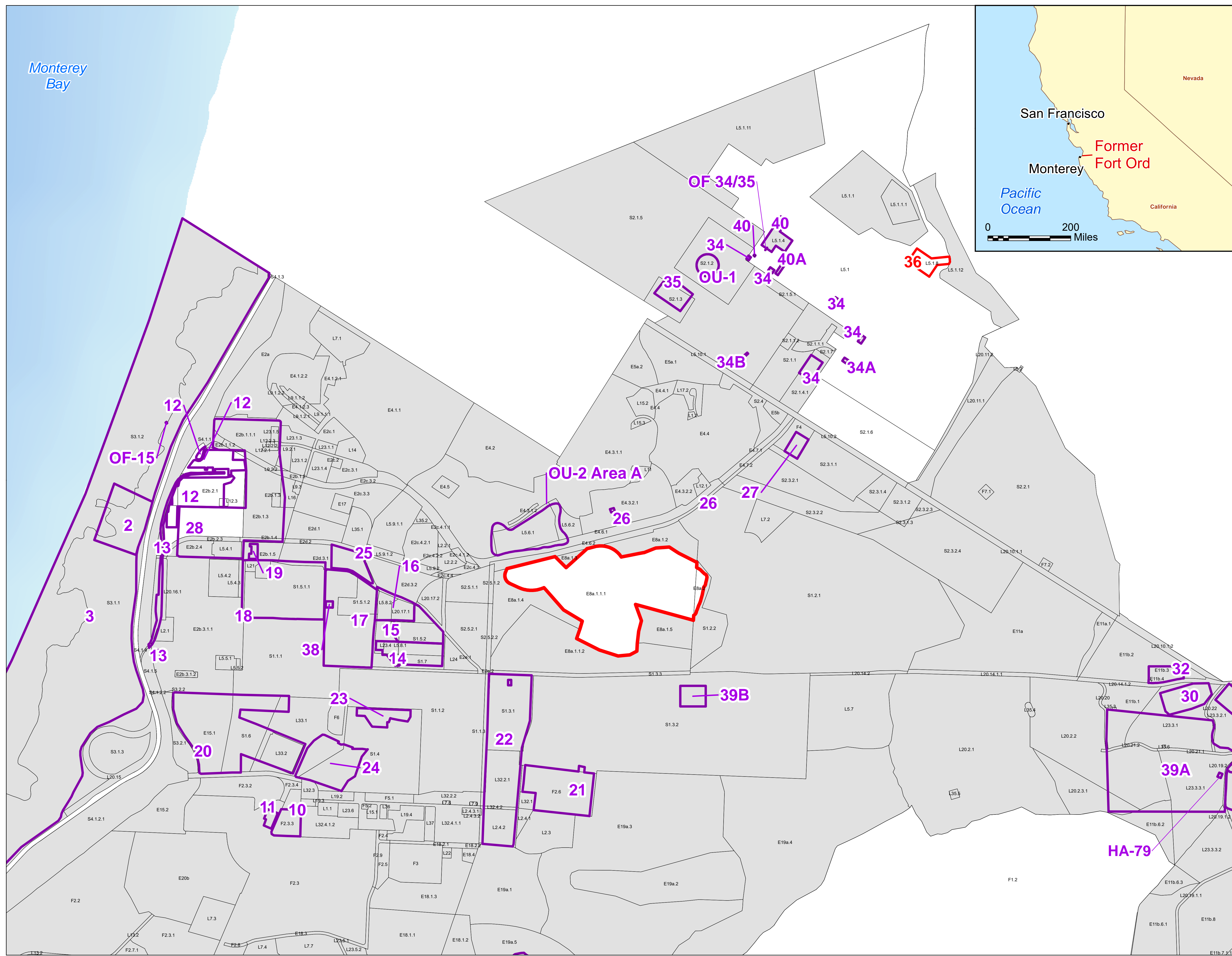
- NOTES**
- Site 4 Beach Stormwater Outfalls comprise of a total of 7 outfall locations in parcels S3.1.1 and S3.1.2. Outfall locations are not shown.
 - Site 39 development parcels are NPL deletion parcels except HA-18D and HA-23D
 - Areas where additional soil sampling is planned as part of PFAS investigation remain on NPL.
 - Sites 2/12: The soil gas investigation area remains on NPL.
 - Groundwater remedies are not being considered for partial deletion at this time. Groundwater plumes are not shown.

Figure 3a HTW Sites - Northern Sites



**FORMER FORT ORD
MONTEREY, CALIFORNIA**

DATA SOURCE:	Fort Ord BRAC	PRINT DATE:	5/8/2020
FILE:	RASR_2020_3a.mxd	DRAWN BY:	AK

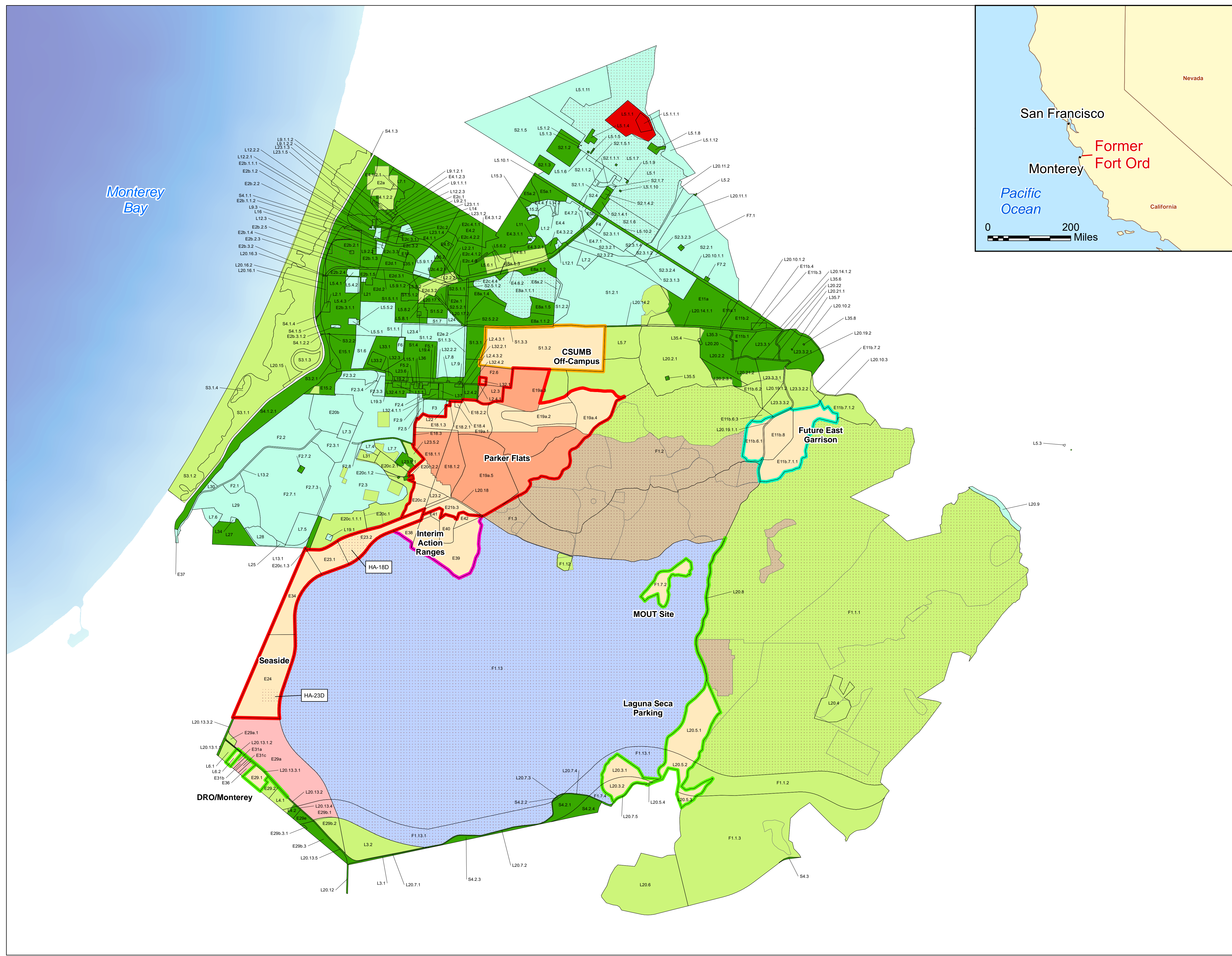
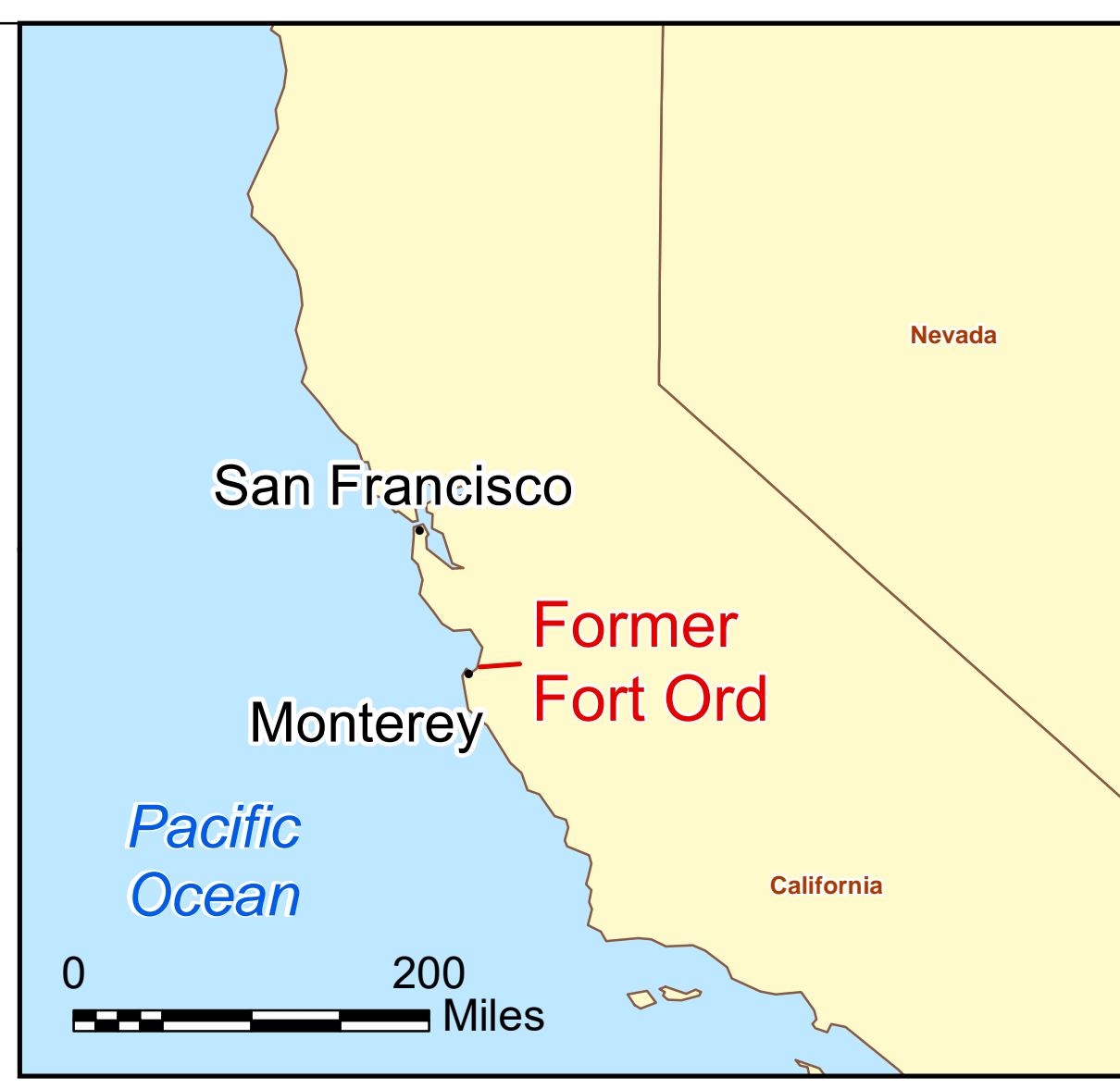


**Remedial Action
Summary Report
Fort Ord
Date: 6/30/2020**

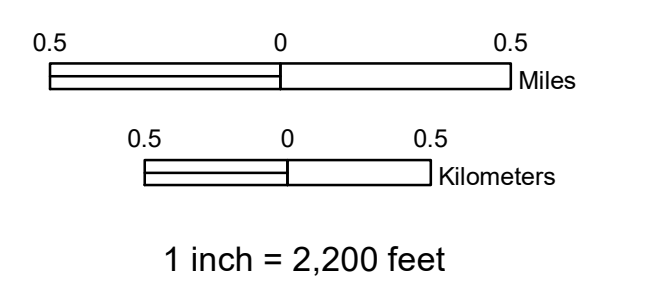
- LEGEND**
- Army Corps of Engineers Parcels
 - ▨ Parcels that Remain on NPL
 - *No Hatch NPL Deletion Parcels - 13,394 Acres

- TRACKS**
- No Action Required
 - Track 2 - MRS-34 (FAAF)
 - Track 1
 - Track 0
 - Track 3 - Impact Area MRA
 - Track 2 - Parker Flats MRA
 - Track 2 - BLM Area B and MRS-16
 - Track 2 - Del Rey Oaks MRA

- ESCA MRAS**
- ▭ Parker Flats and Seaside (Group 1)
 - ▭ CSUMB Off-Campus (Group 2)
 - ▭ DRO / Monterey, Laguna Seca Parking, MOUT (Group 3)
 - ▭ Future East Garrison (Group 4)
 - ▭ Interim Action Ranges



**Figure 4
MMRP Sites**



**FORMER FORT ORD
MONTEREY, CALIFORNIA**

DATA SOURCE: Fort Ord BRAC	PRINT DATE: 6/30/2020
FILE: RASR_2020_4.mxd	DRAWN BY: AK

Tables

Table 1
Fort Ord Decision Document Chronology

Milestones	Date
National Priorities List (NPL) Listing	2/1/1990
Federal Facility Agreement (FFA)	7/1/1990
Base Realignment and Closure (BRAC) Listing	7/1/1991
Interim Action (IA) Sites Record of Decision (ROD)	3/1/1994
Operable Unit (OU) 2, Fort Ord Landfills, ROD	8/1/1994
Base closure	9/30/1994
No Action Sites ROD	4/1/1995
OU 1 Fritzsche Army Air Field (FAAF) Fire Drill Area (FDA) ROD	9/1/1995
OU 2 Explanation of Significant Differences (ESD) #1	8/1/1995
OU 2 ESD #2	8/1/1996
OU 2 ESD #3	1/1/1997
Interim ROD, Site 3 Beach Trainfire Ranges	1/1/1997
Basewide Remedial Investigation (RI) Sites ROD	1/1/1997
ROD, Disposal and Reuse Supplemental Environmental Impact Statement	6/1/1997
No Action Munitions Response (MR) ROD, Track 0	6/1/2002
IA MR ROD for Ranges 43-48, Range 30A, and MRS-16	9/1/2002
First Five-Year Review Report	9/4/2002
Site 39 ESD	12/1/2003
No Further Action (NFA) ROD for Track 1 MR Sites and for Site 3 (MRS-22) with Monitoring	3/1/2005
Track 0 ESD	4/1/2005
OU 2 ESD #4	8/1/2006
Environmental Services Cooperative Agreement (ESCA)	3/1/2007
Amendment 01 to the 1990 FFA	7/1/2007
Second Five-Year Review Report	9/17/2007
OU Carbon Tetrachloride Plume (CTP) ROD	2/1/2008
Track 3 Impact Area Munitions Response Area (MRA) ROD	5/1/2008
Administrative Order on Consent (AOC) for ESCA	7/1/2008
Track 2 Parker Flats MRA ROD	8/1/2008
Track 2 Del Rey Oaks MRA ROD	11/1/2008
Site 39 ROD Amendment	9/1/2009
OU 1 ESD #1	8/1/2010
Third Five-Year Review Report	9/17/2012
ROD for ESCA Group 3, DRO/Monterey, Laguna Seca Parking, and MOUT Site MRAs	11/25/2014
ROD, for ESCA Group 2, California State University Monterey Bay (CSUMB) Off-Campus MRA	2/26/2015
ROD, Track 2 MRS-34, FAAF Area	9/3/2015
ESD #1 to the Basewide RI Sites ROD	2/16/2016
ROD for ESCA Interim Action Ranges (IAR) MRA ROD	1/18/2017
Track 2 BLM Area B and MRS-16 ROD	3/9/2017
Fourth Five-Year Review Report	9/8/2017
ROD for ESCA Group 1, Seaside and Parker Flats (Phase II) MRAs	9/25/2018
ROD for ESCA Group 4, Future East Garrison MRA	9/25/2018

Table 2
NPL Deletion Parcels
Fort Ord, CA

Notes:

1. Additional parcel information is available in parcel search tool at fortordcleanup.com/parcel-search-tool
2. Fort Ord Administrative Record documents can be accessed via document search tool at fortordcleanup.com/documents/search
3. Pink column lists Hazardous and Toxic Waste (HTW) sites associated with the parcel and discussed in Section 4 of the Remedial Action Summary Report.
4. Blue columns provide supporting information for munitions responses (MR). "MR Decision Document (or equivalent)" column lists records of decision, approval memoranda, and other supporting documents such as Community Environmental Response Facilitation Act (CERFA) report. Associated Environmental Protection Agency (EPA) concurrence letters are identified.
5. Deed restrictions are noted in types (e.g., groundwater restriction). Please refer to the deeds for specifics.

Table 2
NPL Deletion Parcels
Fort Ord, CA

USACE Parcel Number	Acreage	Recipient	Transfer Status	Transfer Date	FOST-FOSET	FOST-FOSET (AR#)	HTW Site in Report	MR Decision Document (or equivalent)	Decision Doc AR#	EPA Letter RA Complete	EPA Letter AR#	Deed Restriction	CERCLA Covenant/Warranty
E11a	148.41	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
E11a.1	7.34	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E11b.1	24.54	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E11b.2	41.57	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E11b.3	6.16	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 32	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E11b.4	0.11	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E11b.6.1	47.82	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 4 ROD	ESCA-0360	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E11b.6.2	17.96	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 1 ROD	OE-0526	EPA signature of ROD		Yes: Groundwater Restriction Yes: Residential Use Restriction Yes: Site Access Restriction	Yes: provided in the deed.
E11b.6.3	8.38	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in East Garrison Area 2/4NE	OE-0559A	6/1/2006	OE-0559E.1	No	Yes: provided in the deed.
E11b.7.1.1	129.87	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 41	ESCA Group 4 ROD	ESCA-0360	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E11b.7.1.2	63.25	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 41	Track 1 Plug-in East Garrison Area 2/4NE	OE-0559A	6/1/2006	OE-0559E.1	No Residential Use Restriction Site Access Restriction	Yes: provided in the deed.
E11b.7.2	7.37	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in East Garrison Area 2/4NE	OE-0559A	6/1/2006	OE-0559E.1	No	Yes: provided in the deed.
E11b.8	67.69	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 4 ROD	ESCA-0360	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E15.1	49.25	FORA	Transferred	4/21/2004	FOST 6 (Track 0)	OTH-207H	Site 20	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E15.2	28.74	FORA	Transferred	7/25/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
E17	3.76	FORA	Transferred	10/17/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-604 (entire parcel).
E18.1.1	99.96	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD Track 2 ROD Parker Flats MRA	ESCA-0359 OE-0661	2/28/2019 7/27/2009	ESCA-0370 OE-0667L	Yes: Excavation Restriction (Residential Use Restriction by Amendment No. 1 to Deed No. DACA05-9-07-506 for Parker Flats Ph1 portion of parcel only.)	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-506 for Parker Flats Phase I portion of parcel only.
E18.1.2	77.96	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD Track 2 ROD Parker Flats MRA	ESCA-0359 OE-0661	2/28/2019 7/27/2009	ESCA-0370 OE-0667L	Yes: Excavation Restriction (Residential Use Restriction by Amendment No. 1 to Deed No. DACA05-9-07-505 for Parker Flats Ph1 portion of parcel only.)	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-505 for Parker Flats Phase I portion of parcel only.
E18.1.3	40.01	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E18.2.1	4.13	FORA	Transferred	7/25/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No Residential Use Restriction Site Access Restriction	Yes: provided in the deed.

Table 2
NPL Deletion Parcels
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E18.2.2	0.07	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E18.3	6.23	FORA	Transferred	7/25/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
E18.4	2.16	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E19a.1	71.43	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD Track 2 ROD Parker Flats MRA	ESCA-0359 OE-0661	2/28/2019 7/27/2009	ESCA-0370 OE-0667L	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction (Residential Use Restriction removed by Amendment No. 2 to Deed No. DACA05-9-07-505 for Parker Flats Ph1 portion of parcel only.)	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-505 for Parker Flats Phase I portion of parcel only. The northern portion of E19a.1 is Phase 2. Pending: modification to deed in progress for Phase II.
E19a.2	72.54	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E19a.3	302.64	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD Track 2 ROD Parker Flats MRA Track 1 Plug-in ESCA County North MRA	ESCA-0359 OE-0661 ESCA-0169A	2/28/2019 7/27/2009 2/23/2010	ESCA-0370 OE-0667L ESCA-0169A.3	Residential Use Restriction Site Access Restriction (Partial Residential Use Restriction removed by Amendment No. 2 to Deed No. DACA05-9-07-505 for Parker Flats Ph1 portion of parcel only. Access restriction and residential restriction removed by Amendment No. 2 to Deed No. DACA05-9-07-505 for County North portion of parcel only.)	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-505 for Parker Flats Phase I portion of parcel only, and in Amendment No. 2 to Deed No. DACA05-9-07-505 for County North MRA portion of parcel only
E19a.4	372.27	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 8	ESCA Group 1 ROD Track 2 ROD Parker Flats MRA Track 1 Plug-in ESCA County North MRA	ESCA-0359 OE-0661 ESCA-0169A	2/28/2019 7/27/2009 2/23/2010	ESCA-0370 OE-0667L ESCA-0169A.3	Yes: Excavation Restriction (Partial Residential Use Restriction removed by Amendment No. 2 to Deed No. DACA05-9-07-505 for Parker Flats Ph1 portion of parcel only. Access restriction and residential restriction removed by Amendment No. 2 to Deed No. DACA05-9-07-505 for County North portion of parcel only.)	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-505 for Parker Flats Phase I portion of parcel only, and in Amendment No. 2 to Deed No. DACA05-9-07-505 for County North MRA portion of parcel only
E19a.5	226.56	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 2 ROD Parker Flats MRA	OE-0661	7/27/2009	OE-0667L	Yes: Excavation Restriction Residential Use Restriction removed by Amendment No. 2 to Deed No. DACA05-9-07-508 for entire parcel.	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-508 for Parker Flats Phase I area (entire parcel).
E20b	101.75	FORA	Transferred-reacquired	8/8/2000	Preston and Stilwell Park	OTH-046A		CERFA Report (134) FOST Preston and Stilwell Park Disposal Polygons	BW-1658 OTH-046A	EPA concurrence on CERFA uncontaminated (134) EPA letter on 120(h)(3) (property transferred as 120(h)(4))	BW-1658A OTH-138	No	Yes: provided in the deed.
E20c.1	70.31	FORA	In Progress		FOST12	OTH-259		Track 1 Plug-in MRS-24A/24C/Parcel E20c.1	OE-0741A	10/20/2011	OE-0741A.3		Pending

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E20c.1.1.1	80.36	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	No	Yes: provided in the deed.
E20c.1.2	0.27	FORA	Transferred	7/25/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
E20c.1.3	10.28	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group D	OE-0587	6/27/2006	OE-0587D.1	No	Yes: provided in the deed.
E20c.2	33.2	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E20c.2.1	25.36	FORA	Transferred	7/25/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Protection Site Access Restriction	Yes: provided in the deed.
E20c.2.2	2.3	FORA	Transferred	7/25/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
E21b.3	31.55	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E23.1	13.29	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
E23.2	72.82	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
E24	180.557	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
E29.1	22.48	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
E29.2	11.88	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39dev	Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	Residential Use Restriction Site Access Restriction	Yes: provided in the deed.
E29a	271.6	FORA	Transferred	12/28/2005	FOSET 4 (Del Rey Oaks Group)	FOSET-003K	Site 39dev	Track 2 ROD Del Rey Oaks MRA	OE-0670	8/20/2010	OE-0714A.2	Yes: Excavation Restriction Soil Disturbance Restriction (Residential Use Restriction on the parcel is to be released per ROD)	Modification to deed in progress.
E29a.1	4.66	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39dev	Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	No	Yes: provided in the deed.
E29b.1	33.52	FORA	Transferred	12/28/2005	FOSET 4 (Del Rey Oaks Group)	FOSET-003K	Site 39dev	Track 2 ROD Del Rey Oaks MRA	OE-0670	8/20/2010	OE-0714A.2	Yes: Excavation Restriction	Modification to deed in progress.
E29b.2	31.19	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39dev	Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	Soil Disturbance Restriction Residential Use Restriction	Yes: provided in the deed.
E29b.3	27.71	FORA	Transferred	10/6/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E	Site 39dev	Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
E29b.3.1	0.65	FORA	Transferred	6/5/2019	FOST12	OTH-259		CERFA Report	BW-1658	EPA concurrence on CERFA uncontaminated	BW-1658A		Yes: provided in the deed.
E29e	9.45	FORA	Transferred	10/6/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.

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E2a	63.07	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 Plug-in MRS-6EXP Track 1 ROD	OE-0527C OE-0529 OE-0526	7/19/2005 6/20/2005 EPA signature of ROD	OE-0527F.1 OE-0529D.1 -	Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.1.1.1	25.28	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 28	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.1.1.2	1.66	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.1.2	6.05	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.1.3	34.74	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.1.4	2.36	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.1.5	12.08	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 18 Site 19	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.2.3	4.33	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.2.4	7.54	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.3.1.1	107.99	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 28	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2b.3.1.2	1.76	FORA	Transferred	8/8/2000	Building 1021	OTH-081		CERFA Report FOST Building 1021	BW-1658 OTH-081	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-166	No	Yes: provided in the deed.
E2b.3.2	0.11	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.1	13.29	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.2	1.12	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.3.1	11.37	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.3.2	9.26	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.3.3	31.27	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.4.1.1	10.08	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.4.1.2	1.28	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.4.2.1	13.39	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.4.2.2	2.14	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.4.3	2.64	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0587 OE-0591H	6/27/2006 7/21/2006	OE-0587D.1 OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E2c.4.4	1.11	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E2d.1	14.97	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2d.2	5.45	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2d.3.1	25.2	FORA	Transferred	3/21/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E	Site 25	Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E2d.3.2	21.6	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0587 OE-0591H	6/27/2006 7/21/2006	OE-0587D.1 OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E2e.1	6.1	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E2e.2	0.15	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E31a	4.89	FORA	Transferred	12/28/2005	FOSET 4 (Del Rey Oaks Group)	FOSET-003K	Site 39dev	Track 2 ROD Del Rey Oaks MRA	OE-0670	8/20/2010	OE-0714A.2	Yes: Excavation Restriction	Modification to deed in progress.
E31b	3.34	FORA	Transferred	12/28/2005	FOSET 4 (Del Rey Oaks Group)	FOSET-003K	Site 39dev	Track 2 ROD Del Rey Oaks MRA	OE-0670	8/20/2010	OE-0714A.2	Soil Disturbance Restriction Yes: Excavation Restriction Residential Use Restriction	Modification to deed in progress.
E31c	3.92	FORA	Transferred	12/28/2005	FOSET 4 (Del Rey Oaks Group)	FOSET-003K	Site 39dev	Track 2 ROD Del Rey Oaks MRA	OE-0670	8/20/2010	OE-0714A.2	Soil Disturbance Restriction Yes: Excavation Restriction Residential Use Restriction	Modification to deed in progress.

Soil Disturbance Restriction
Residential Use Restriction

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E34	97.07	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
E36	6.41	FORA	Transferred	12/28/2005	FOSET 4 (Del Rey Oaks Group)	FOSET-003K	Site 39dev	Track 2 ROD Del Rey Oaks MRA	OE-0670	8/20/2010	OE-0714A.2	Yes: Excavation Restriction Yes: Residential Use Restriction Site Access Restriction	Modification to deed in progress.
E37	2.35	Seaside / Hayes	Transferred	7/25/2002	Surplus II Area A	OTH-193		CERFA Report FOST Surplus II Parcels Area A	BW-1658 OTH-193	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-137H	No Soil Disturbance Restriction Residential Use Restriction	Yes: provided in the deed.
E38	17.71	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39	ESCA Interim Action Ranges MRA ROD	ESCA-0331	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
E39	161.69	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39	ESCA Interim Action Ranges MRA ROD	ESCA-0331	9/27/2018	ESCA-0363	Yes: Excavation Restriction Yes: Residential Use Restriction Site Access Restriction	Pending: modification to deed in progress.
E4.1.1	153.5	FORA	Transferred	10/17/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-604 (entire parcel).
E4.1.2.1	9.63	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 Plug-in MRS-6EXP	OE-0527C OE-0529	7/19/2005 6/20/2005	OE-0527F.1 OE-0529D.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.1.2.2	26.24	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 Plug-in MRS-6EXP Track 1 ROD	OE-0527C OE-0529 OE-0526	7/19/2005 6/20/2005 EPA signature of ROD	OE-0527F.1 OE-0529D.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.1.2.3	0.99	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C	OE-0527C	7/19/2005	OE-0527F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.2	65.52	FORA	Transferred	10/17/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-604 (entire parcel).
E4.3.1.1	178.21	FORA	Transferred	10/17/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	OU2 Area A	Track 0 ROD Track 1 ORD	OE-0406 OE-0526	EPA signature of ROD EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-604 (entire parcel).
E4.3.1.2	1.22	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	OU2 Area A	Track 0 Plug-in Group C	OE-0527C	7/19/2005	OE-0527F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.3.2.1	42.31	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	Site 26	Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.3.2.2	7.96	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	OUCTP	Track 0 Plug-in Group C	OE-0527C	7/19/2005	OE-0527F.1	Yes: Groundwater Restriction	Modification to deed in progress.
E4.4	93.6	FORA	Transferred	8/8/2000	Preston and Stilwell Park	OTH-046A		CERFA Report (220, 142,4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Preston and Stilwell Park Disposal Polygons	BW-1658 OTH-046A	EPA concurrence on CERFA uncontaminated (220, 142) EPA letter on 120(h)(3) (property transferred as 120(h)(4))	BW-1658A OTH-138	No	Yes: provided in the deed.
E4.4.1	4.78	FORA	Transferred	5/5/2015	Preston and Stilwell Park	OTH-046A		CERFA Report (220) FOST Preston and Stilwell Park Disposal Polygons	BW-1658 OTH-046A	EPA concurrence on CERFA uncontaminated (220) EPA letter on 120(h)(3) (property transferred as 120(h)(4))	BW-1658A OTH-138	No	Yes: provided in the deed.
E4.5	3.8	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E4.6.1	25.08	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	OU2 Area A	Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.6.2	16.44	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
E4.7.1	6.16	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	Yes: Groundwater Restriction	Modification to deed in progress.
E4.7.2	3.99	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	Yes: Groundwater Restriction	Modification to deed in progress.

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USACE Parcel Number	Acreage	Recipient	Transfer Status	Transfer Date	FOST-FOSET	FOST-FOSET (AR#)	HTW Site in Report	MR Decision Document (or equivalent)	Decision Doc AR#	EPA Letter RA Complete	EPA Letter AR#	Deed Restriction	CERCLA Covenant/Warranty
E40	25.32	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Interim Action Ranges MRA ROD	ESCA-0331	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
E41	9.14	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39	ESCA Interim Action Ranges MRA ROD	ESCA-0331	9/27/2018	ESCA-0363	Yes: Excavation Restriction Residential Use Restriction Site Access Restriction	Pending: modification to deed in progress.
E42	12.79	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39	ESCA Interim Action Ranges MRA ROD	ESCA-0331	9/27/2018	ESCA-0363	Yes: Excavation Restriction Residential Use Restriction Site Access Restriction	Pending: modification to deed in progress.
E5a.1	30.59	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Excavation Restriction Residential Use Restriction Site Access Restriction	Modification to deed in progress.
E5a.2	15.41	FORA	Transferred	3/21/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E5b	3.21	FORA	Transferred	8/8/2000	Preston and Stilwell Park	OTH-046A		CERFA Report (220) FOST Preston and Stilwell Park Disposal Polygons	BW-1658 OTH-046A	EPA concurrence on CERFA uncontaminated (220) EPA letter on 120(h)(3) (property transferred as 120(h)(4))	BW-1658A OTH-138	No	Yes: provided in the deed.
E8a.1.1.2	85.3	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C	OE-0527C	7/19/2005	OE-0527F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
E8a.1.2	21.22	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E8a.1.3	2.68	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E8a.1.4	30.32	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
E8a.1.5	21.53	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
F1.1.2	288.82	BLM	Transferred	10/18/1996	NA	Not Applicable		Track 1 Plug-in BLM Area A	OE-0780	11/1/2012	OE-0780.5	No	NA for fed-fed parcel transfer
F1.1.3	775.62	BLM	Transferred	10/18/1996	NA	Not Applicable		Track 1 Plug-in BLM Area A Track 1 ROD	OE-0780 OE-0526	11/1/2012 EPA signature of ROD	OE-0780.5 --	No	NA for fed-fed parcel transfer
F1.12	12.98	BLM	Transferred	10/18/1996	NA	Not Applicable	Site 39dev	Track 1 Plug-in BLM HQ & MRS-35	OE-0740	9/28/2011	OE-0740.6	No	NA for fed-fed parcel transfer
F1.7.2	51.25	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
F2.1	14.81	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (130)	BW-1658	EPA concurrence on CERFA uncontaminated (130)	BW-1658A	Residential Use Restriction Site Access Restriction	
F2.2	199.02	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (134)	BW-1658	EPA concurrence on CERFA uncontaminated (134)	BW-1658A		
F2.3	431.29	Ord Military Community (formerly POM Annex)	Retained		Retained		Site 11	Track 1 Plug-in MRS-24A/24C/Parcel E20c.1 Track 1 ROD CERFA report	OE-0741A OE-0526 --	10/20/2011 EPA signature of ROD --	OE-0741A.3 -- --		
F2.3.1	44.25	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (134)	BW-1658	EPA concurrence on CERFA uncontaminated (134)	BW-1658A		

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F2.3.2	22.52	Seaside	Retained-Transferred	8/28/2008				CERFA Report (162, 213, 106, 28) (None of the sites listed in Table 5-1 for Parcels 28/106 is munitions related) (Parcel is transferred as 120(h)(3)) (No munitions response site was subsequently identified)	BW-1658	EPA concurrence on CERFA uncontaminated (213, 106) EPA unable to concur on CERFA uncontaminated due to UXO (162) (However, the nearest munitions response site are MRS-20 and MRS-39, both of which were subsequently documented as Track 1 sites.)	BW-1658A	No	Not required for 120(h)(4).
F2.3.3	11.28	Seaside	Retained-Transferred	8/28/2008			Site 10	CERFA Report (28) (None of the sites listed in Table 5-1 for Parcel 28 is munitions related) (Parcel is transferred as 120(h)(3)) (No munitions response site was subsequently identified)	BW-1658			No	Yes: provided in the deed.
F2.3.4	2.84	Seaside	Retained-Transferred	8/28/2008				CERFA Report (28, 213) (None of the sites listed in Table 5-1 for Parcel 28 is munitions related) (Parcel is transferred as 120(h)(3)) (No munitions response site was subsequently identified)	BW-1658	EPA concurrence on CERFA uncontaminated (213)	BW-1658A	No	Not required for 120(h)(4).
F2.4	0.94	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (114)	BW-1658	EPA unable to concur on CERFA uncontaminated due to radiological source concerns (113) (no UXO issues)	BW-1658A		
F2.5	5.61	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (38, 226, 119) (None of the sites listed in Table 5-1 for Parcels 38/119 is munitions related)	BW-1658	EPA concurrence on CERFA uncontaminated (226) EPA unable to concur on CERFA uncontaminated due to potential for hazardous substances storage in bldg. 4390 (119) (no UXO issues)	BW-1658A		
F2.6	35.5	Ord Military Community (formerly POM Annex)	Retained		Retained		Site 21	Track 2 ROD Parker Flats MRA	OE-0661	7/27/2009	OE-0667L		
F2.7.1	372.98	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
F2.7.2	2.17	Seaside / golf course	Transferred	9/2/2004	FOST 6 (Track 0)	OTH-207H	Site 33	Track 0 ROD	OE-0406	EPA signature of ROD	--	Yes: Residential Use Restriction	Yes: provided in the deed.
F2.7.3	3.06	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
F2.8	0.78	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (213, 205)	BW-1658	EPA concurrence on CERFA uncontaminated (213, 205)	BW-1658A		
F2.9	2.33	Ord Military Community (formerly POM Annex)	Retained					CERFA Report (228)	BW-1658	EPA concurrence on CERFA uncontaminated (228)	BW-1658A		

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F3	24.25	DFAS (Defense Finance and Accounting)	Retained					CERFA Report (37, 119) (None of the sites listed in Table 5-1 for Parcels 37/119 is munitions related)	BW-1658	EPA unable to concur on CERFA uncontaminated due to potential for hazardous substances storage in bldg. 4390 (119) (no UXO issues)	BW-1658A		
F4	9.84	US Army Reserve	Retained				Site 27	CERFA Report (58, 220) (None of the sites listed in Table 5-1 for Parcel 58 is munitions related)	BW-1658	EPA concurrence on CERFA uncontaminated (220)	BW-1658A		
F5.1	5.16	Cal Army National Guard	Retained					CERFA Report (195, 33, 114) (None of the sites listed in Table 5-1 for Parcels 33/114 is munitions related)	BW-1658	EPA concurrence on CERFA uncontaminated (195)	BW-1658A		
F5.2	0.41	Cal Army National Guard	Retained					CERFA Report (114) (None of the sites listed in Table 5-1 for Parcel 114 is munitions related) (No munitions response site was subsequently identified)	BW-1658				
F6	6.1	Veterans Administration	Transferred	6/23/1998	NA	Not Applicable		CERFA Report (111) Letter of Transfer Dept of Veterans Affairs	BW-1658 OTH-235	EPA concurrence on CERFA uncontaminated	BW-1658A	No	NA for fed-fed parcel transfer
F7.1	1.49	FORA	Transferred	3/2/2011	UCSC Phase I	OTH-205		Track 0 ROD	OE-0406	EPA signature of ROD	--	Yes: Groundwater Restriction	Yes: provided in the deed.
F7.2	1.22	UCMBEST	Transferred	3/2/2011	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD	--	Yes: Groundwater Restriction	Yes: provided in the deed.
L1.1	3.17	Monterey College of Law	Transferred	12/3/2003	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L1.2	0.55	Monterey College of Law	Transferred	6/26/1997	Monterey College of Law	OTH-014B		CERFA Report (220) FOST Monterey College of Law	BW-1658 OTH-014B	EPA concurrence on CERFA uncontaminated (220)	BW-1658A	No	Yes: provided in the deed.
L11	2.29	Interim Inc	Transferred	7/2/1996	Interim, Inc	OTH-057B		CERFA Report FOST Interim, Inc.	BW-1658 OTH-057B	EPA concurrence on CERFA (disqualified) EPA concurrence on 120(h)(4)	BW-1658A OTH-057A	No	Yes: provided in the deed.
L12.1	2.34	Shelter Outreach Plus	Transferred	3/2/1996	Peninsula Outreach Buildings 6279, 6280	OTH-039A		CERFA Report (4) FOST Peninsula Outreach Welcome House	BW-1658 OTH-039A	-- EPA concurrence on 120(h)(4)	-- OTH-039	No	Yes: provided in the deed.
L12.2.1	0.91	Shelter Outreach Plus	Transferred	1/22/1999	Peninsula Outreach Buildings T-2814 to T-2817, T2836	OTH-010		CERFA Report (4) FOST Peninsula Outreach Welcome House (T-buildings) (They were included in IRP Site 28)	BW-1658 OTH-010	-- EPA comments on FOST: EPA would concur on 120(h)(4)	-- OTH-064	No	Yes: provided in the deed.
L12.2.2	0.27	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L12.2.3	0.26	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: provided in the deed.
L13.1	8.61	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
L13.2	14.7	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
L14	6.14	Children's Services Inc	Transferred	8/13/1997	Children's Services International	OTH-236		CERFA Report FOST Children's Services International	BW-1658 OTH-236	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-080	Yes: Groundwater Restriction	Yes: provided in the deed.
L15.1	1.68	Housing Authority Monterey County	Transferred	9/30/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L15.2	7.1	Housing Authority Monterey County	Transferred	7/3/1996	Housing Authority of Monterey County	OTH-057C		CERFA Report FOST Housing Authority	BW-1658 OTH-057C	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-057A	No	Yes: provided in the deed.

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L15.3	1.45	Housing Authority Monterey County	Transferred	7/3/1996	Housing Authority of Monterey County	OTH-057C		CERFA Report FOST Housing Authority	BW-1658 OTH-057C	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-057A	No	Yes: provided in the deed.
L16	5.1	Goodwill Industries	Transferred	11/26/1997	Goodwill Industries	OTH-015B		CERFA Report (4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Goodwill Industries	BW-1658 OTH-015B			Yes: Groundwater Restriction	Yes: provided in the deed.
L17.2	6.65	Shelter Outreach Plus	Transferred	5/7/1996	Shelter Plus	OTH-021C		CERFA Report (220) FOST Shelter Plus	BW-1658 OTH-021C	EPA concurrence on CERFA uncontaminated (220)	BW-1658A	No	Yes: provided in the deed.
L19.1	2.07	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
L19.2	3.82	FORA	Transferred	4/21/2004	FOST 6 (Track 0)	OTH-207H	Site 24	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L19.3	1.23	FORA	Transferred	4/21/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L19.4	7.36	FORA	Transferred	4/21/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L2.1	4.54	Monterey-Salinas Transit (MST)	Transferred	3/25/2003	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		CERFA Report FOST Bldg 2058 Track 0 ROD	BW-1658 OTH-045A OE-0406	EPA concurrence on CERFA EPA concurrence on 120(h)(3) EPA signature of ROD	BW-1658A OTH-109 --	No	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-603 (entire parcel).
L2.2.1	2.11	Monterey-Salinas Transit (MST)	Transferred	5/20/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD Track 1 Plug-in Groups 1-5	OE-0406 OE-0591H	EPA signature of ROD 7/21/2006	OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
L2.2.2	4.54	Monterey-Salinas Transit (MST)	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
L2.3	24.22	FORA	In Progress		FOST11	OTH-254A		Track 2 ROD Parker Flats MRA	OE-0661	7/27/2009	OE-0667L		Pending
L2.4.1	2.79	FORA	In Progress		FOST11	OTH-254A		Track 2 ROD Parker Flats MRA	OE-0661	7/27/2009	OE-0667L		Pending
L2.4.2	13.16	Monterey-Salinas Transit (MST)	Transferred	3/25/2003	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	Site 22	Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-603 (entire parcel).
L2.4.3.1	1.5	Monterey-Salinas Transit (MST)	Transferred	3/25/2003	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-603 (entire parcel).
L2.4.3.2	0.12	Monterey-Salinas Transit (MST)	Transferred	3/25/2003	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-603 (entire parcel).
L20.10.1.1	16.98	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.10.1.2	9.22	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.10.2	5.21	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.10.3	2.22	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.11.1	31.19	FORA	Transferred	8/8/2000	Blanco Road	OTH-045B		CERFA Report FOST Blanco Rd	BW-1658 OTH-045B	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-107	No	Yes: provided in the deed.
L20.11.2	7.67	FORA	Transferred	8/8/2000	Blanco Road	OTH-045B		CERFA Report FOST Blanco Rd	BW-1658 OTH-045B	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-107	No	Yes: provided in the deed.
L20.12	2.49	Monterey County	Transferred	1/29/1997	York Road	OTH-004		CERFA Report (230) FOST York Rd	BW-1658 OTH-004	EPA letter on CERFA, unable to concur as uncontaminated due to two releases (no UXO issue)	BW-1658A	No	Yes: provided in the deed.
L20.13.1.1	2.9	FORA	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.

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L20.13.1.2	0.2	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.13.2	0.98	FORA	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.13.3.1	4.84	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.13.3.2	3.07	FORA	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.13.4	1.62	FORA	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.13.5	6.71	FORA	Transferred	10/23/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C	OE-0527C	7/19/2005	OE-0527F.1	No	Yes: provided in the deed.
L20.14.1.1	8.42	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L20.14.1.2	7.76	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.14.2	3.23	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L20.15	20.05	FORA	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 1 ROD	OE-0526	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.16.1	3.86	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.16.2	10.55	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 13	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.16.3	0.14	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.17.1	8.06	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 15 Sites 16/17	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.17.2	8.26	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0587 OE-0591H	6/27/2006 7/21/2006	OE-0587D.1 OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
L20.18	7.24	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.19.1.1	6.43	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 4 ROD	ESCA-0360	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.19.1.2	3.26	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in East Garrison Area 2/4NE	OE-0559A	6/1/2006	OE-0559E.1	No	Yes: provided in the deed.
L20.19.2	0.55	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD Track 1 ROD	OE-0406 OE-0526	EPA signature of ROD EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.2.1	252.66	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 1 Plug-in ESCA County North MRA Track 1 Plug-in Groups 1-5	ESCA-0169A OE-0591H	2/23/2010 7/21/2006	ESCA-0169A.3 OE-0591F.1	Yes: Excavation Restriction Site Access and Residential Restriction removed by Amendment No.2 to Deed No. DACA05-9-07-505 for County North MRA (entire parcel).	Yes: in Amendment No. 2 to Deed No. DACA05-9-07-505 for County North MRA (entire parcel).
L20.2.2	115.73	Monterey County	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39A	Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5 Track 1 ROD	OE-0587 OE-0591H OE-0526	6/27/2006 7/21/2006 EPA signature of ROD	OE-0587D.1 OE-0591F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L20.2.3.1	29.03	Monterey County	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5 Track 1 ROD	OE-0587 OE-0591H OE-0526	6/27/2006 7/21/2006 EPA signature of ROD	OE-0587D.1 OE-0591F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.

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L20.20	2.25	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.21.1	2.58	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.21.2	1.84	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 39A	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.22	2.41	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 39A	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L20.3.1	43.63	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.3.2	35.5	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Residential Use Restriction Yes: Excavation Restriction Access Restriction	Pending: modification to deed in progress.
L20.4	65.88	BLM	In Progress					Track 1 Plug-in BLM Area A Track 1 ROD	OE-0780 OE-0526	11/1/2012 EPA signature of ROD	OE-0780.5 --	Residential Use Restriction Site Access Restriction	NA for fed-fed parcel transfer
L20.5.1	131.36	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.5.2	54.53	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
L20.5.3	9.69	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
L20.5.4	0.51	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39dev	ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Residential Use Restriction Yes: Excavation Restriction Site Access Restriction	Pending: modification to deed in progress.
L20.6	247.19	Monterey County	Transferred	7/6/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 1 ROD	OE-0526	EPA signature of ROD		Residential Use Restriction Site Access Restriction	Yes: provided in the deed.
L20.7.1	3.32	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.7.2	7.18	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.7.3	0.71	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.7.4	1.23	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.7.5	4.31	FORA	Transferred	10/18/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L20.8	7.25	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
L20.9	18.92	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		CERFA Report FOST 6 (Track 0)	BW-1658 OTH-207H	EPA concurrence on CERFA uncontaminated EPA comments on FOST	BW-1658A OTH-207E	Residential Use Restriction Yes: Groundwater Restriction Site Access Restriction	Yes: provided in the deed.
L21	1.56	MIRA (Monterey Institute for Research in Astronomy)	Transferred	3/22/1996	Monterey Institute for Research in Astronomy	OTH-063B	Site 18	EBS CERFA FOST MIRA	OTH-026 BW-1658 OTH-063B/ OTH-067A/ OTH-063A	EPA concurrence on CERFA EPA on 120(h)(3)	OTH-067 BW-1658A OTH-067	No	Yes: provided in the deed.
L22	1.15	Pacific Gas and Electric	Transferred	3/27/1997	Pacific Gas & Electric Substation	OTH-127		EBS CERFA FOST PGE Substation	OTH-024 BW-1658 OTH-127	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	OTH-067 BW-1658A OTH-067	No	Yes: provided in the deed.
L23.1.1	2.37	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L23.1.2	5.56	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L23.1.3	4.85	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.

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L23.1.4	6.66	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L23.1.5	1.37	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L23.2	10.59	FORA-MPC	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 1 ROD	ESCA-0359	2/28/2019	ESCA-0370	Yes: Excavation Restriction	Pending: modification to deed in progress.
L23.3.1	54.42	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 30 Site 39A	Track 0 ROD	OE-0406	EPA signature of ROD		Residential Use Restriction Yes: Groundwater Restriction Site Access Restriction	Yes: provided in the deed.
L23.3.2.1	85.35	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 29	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L23.3.2.2	63.68	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 31	Track 1 Plug-in East Garrison Area 2/4NE	OE-0559A	6/1/2006	OE-0559E.1	Yes: Excavation and Exposure of Soil Restriction Exhibit B of the Quitclaim Deed includes a provision that requires compliance with the Habitat Management Plan which places some conditions on land use.	Yes: provided in Quitclaim Deed No. DACA05-9-06-549.
L23.3.3.1	57.63	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39A	Track 0 Plug-in East Garrison Area 1 Track 1 ROD	OE-0472 OE-0526	2/18/2004 EPA signature of ROD	OE-0472J --	Yes: Groundwater Restriction	Yes: provided in the deed.
L23.3.3.2	31.62	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in East Garrison Area 2/4NE	OE-0559A	6/1/2006	OE-0559E.1	No	Yes: provided in the deed.
L23.4	0.96	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 14	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L23.5.1	15.17	Chartwell School	Transferred	3/16/2007	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	No	Yes: provided in the deed.
L23.5.2	14.53	Chartwell School	Transferred	3/2/2011	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	No	Yes: provided in the deed.
L23.6	3.52	MPC (Monterey Peninsula College)	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L24	7.19	Golden Gate University	Transferred	8/31/1996	Golden Gate University	OTH-066E		CERFA FOST Golden Gate University	BW-1658 OTH-066E	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-038	No	Yes: provided in the deed.
L25	2.11	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
L27	52.11	RINC Organization	Transferred	2/3/2003	FOST 7 (Brostrom Park 2002), FOST 6 (Track 0)	OTH-208D	Site 37	Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: provided in the deed.
L28	23.88	Empire West Corp	Transferred	7/17/1999	Thorson Village	OTH-012D		CERFA Report FOST Thorson Village	BW-1658 OTH-012D	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-012C	No	Yes: provided in the deed.
L29	106.95	Seaside / Hayes	Transferred	7/25/2002	Hayes Park	OTH-016B		CERFA Report FOST Hays Park Parcel	BW-1658 OTH-016B	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-016C	No	Yes: provided in the deed.
L3.1	5.39	FORA-York School	Transferred	3/16/2007	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L3.2	101.2	FORA-York School	Transferred	3/2/2011	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39dev	Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	No	Yes: provided in the deed.
L30	5.24	Seaside / Hayes	Transferred	7/25/2002	Surplus II Area A	OTH-193		CERFA Report FOST Surplus II Parcels Area A	BW-1658 OTH-193	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-137H	No	Yes: provided in the deed.

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L31	11.65	FORA	Transferred	7/25/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	No	Yes: provided in the deed.
L32.1	2.95	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 2 ROD Parker Flats MRA	OE-0661	7/27/2009	OE-0667L	Yes: Excavation Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-07-505 for Parker Flats Phase I area (entire parcel).
L32.2.1	23.94	CSUMB	Transferred	1/26/2004	FOST 6 (Track 0)	OTH-207H	Site 22	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L32.2.2	9.29	CSUMB	Transferred	1/26/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L32.3	3.72	CSUMB	Transferred	1/26/2004	FOST 6 (Track 0)	OTH-207H	Site 24	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L32.4.1.1	37.54	FORA	Transferred	12/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L32.4.1.2	16.24	FORA	Transferred	10/17/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: in Amendment No. 1 to Deed No. DACA05-9-01-605 (entire parcel).
L32.4.2	3.98	FORA	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H	Site 22	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L33.1	48.28	CSUMB	Transferred	1/26/2003	FOST 6 (Track 0)	OTH-207H	Site 20 Site 24	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L33.2	12.98	CSUMB	Transferred	1/26/2003	FOST 6 (Track 0)	OTH-207H	Site 20	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L34	1.73	Seaside / golf course	Transferred	1/15/1997	Golf Course Phase 1	OTH-141		Golf Course Property Transfer Screening Assessment Report FOST Golf Course Phase 1	BW-1518 OTH-141	-- EPA letter on 120(h)(3)	-- OTH-144	No	Yes: provided in the deed.
L35.1	10.61	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L35.2	1.71	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L35.3	0.1	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L35.4	1.09	Marina Coast Water District	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group B Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0525F OE-0587 OE-0591H	6/7/2005 6/27/2006 7/21/2006	OE-0525J.1 OE-0587D.1 OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
L35.5	0.92	Marina Coast Water District	Transferred	12/8/2005	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
L35.6	0.13	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 39A	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L35.7	0.1	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L35.8	0.14	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L36	1.16	FORA	In Progress					Track 0 ROD	OE-0406	EPA signature of ROD	--	No	Yes: provided in the original deed.
L37	4.19	American Youth Hostel	Transferred	5/16/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: in Amendment No. 1 to Deed No. DACA05-9-08-528 (entire parcel).
L4.1	18.1	City of Monterey	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39dev	Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0587 OE-0591H	6/27/2006 7/21/2006	OE-0587D.1 OE-0591F.1	No	Yes: provided in the deed.
L4.2	7.03	City of Monterey	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H	Site 39dev	Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0587 OE-0591H	6/27/2006 7/21/2006	OE-0587D.1 OE-0591F.1	No	Yes: provided in the deed.
L5.1.1	72.12	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J		Track 2 ROD MRS-34 (FAAF)	OE-0866	EPA signature of ROD		Yes: Use Restriction	Modification to deed in progress.
L5.1.1.1	12	FORA	Transferred	11/8/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J		Track 2 ROD MRS-34 (FAAF)	OE-0866	EPA signature of ROD		Yes: Use Restriction	Modification to deed in progress.
L5.1.10	0.22	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 34	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.

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USACE Parcel Number	Acreage	Recipient	Transfer Status	Transfer Date	FOST-FOSET	FOST-FOSET (AR#)	HTW Site in Report	MR Decision Document (or equivalent)	Decision Doc AR#	EPA Letter RA Complete	EPA Letter AR#	Deed Restriction	CERCLA Covenant/Warranty
L5.1.11	130.32	Marina	Transferred	8/11/1995	FAAF Phase 1	OTH-148		EBS CERFA (221) FOST FAAF Phase I	OTH-110 BW-1658 OTH-148	EPA letter on EBS affirms 120(h)(3) EPA concurrence on CERFA uncontaminated (221) EPA concurrence on FOST 120(h)(3) parcels and 120(h)(4) parcels	BW-1032 BW-1658A OTH-001A	No	Yes: provided in the deed.
L5.1.12	43.14	Marina	Transferred	8/11/1995	FAAF Phase 1	OTH-148		EBS (221) CERFA FOST FAAF Phase I	OTH-110 BW-1658 OTH-148	EPA letter on EBS affirms 120(h)(3) EPA concurrence on CERFA uncontaminated (221) EPA concurrence on FOST 120(h)(3) parcels and 120(h)(4) parcels	BW-1032 BW-1658A OTH-001A	No	Yes: provided in the deed.
L5.1.2	0.03	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 40	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.1.3	0.11	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 40	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.1.4	6.17	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 40 OF-34/35	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.1.5	0.56	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 40	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.1.6	0.23	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 34	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.1.7	0.23	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 34	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.1.9	0.44	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J	Site 34	Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.10.1	8.51	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Modification to deed in progress.
L5.10.2	12.55	FORA	Transferred	3/21/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L5.2	0.27	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J		Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.3	0.27	Marina	Transferred	10/5/2001	FOSET 1 (Fritzsche Army Airfield Phase II)	FOSET-001J		Track 0 ROD	OE-0406	EPA signature of ROD		No	Modification to deed in progress.
L5.4.1	5.69	Marina	Transferred	5/8/1998	Marina Sports Center	OTH-126		CERFA Report FOST Marina Sports Center	BW-1658 OTH-126	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-108	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.4.2	13.4	Marina	Transferred	5/8/1998	Marina Sports Center	OTH-126		CERFA Report FOST Marina Sports Center	BW-1658 OTH-126	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-108	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.4.3	1.63	Marina	Transferred	5/8/1998	Marina Sports Center	OTH-126		CERFA Report FOST Marina Sports Center	BW-1658 OTH-126	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-108	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.5.1	3.46	Marina	Transferred	5/8/1998	Marina Sports Center	OTH-126		CERFA Report FOST Marina Sports Center	BW-1658 OTH-126	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-108	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.5.2	0.55	Marina	Transferred	5/8/1998	Marina Sports Center	OTH-126		CERFA Report FOST Marina Sports Center	BW-1658 OTH-126	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-108	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.6.1	22.54	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	OU2 Area A	Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.6.2	8.47	FORA	Transferred	3/13/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	OU2 Area A	Track 0 Plug-in Group C Track 1 ROD	OE-0527C OE-0526	7/19/2005 EPA signature of ROD	OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.7	73.44	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		Track 1 Plug-in ESCA County North MRA	ESCA-0169A	2/23/2010	ESCA-0169A.3	Yes: Excavation Restriction Site Access and Residential Restriction removed by Amendment No.2 to Deed No. DACA05-9-07-505 for entire parcel.	Yes: in Amendment No. 2 to Deed No. DACA05-9-07-505 for County North MRA (entire parcel).

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L5.8.1	7.05	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Site 14 Sites 16/17	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L5.8.2	4.86	FORA	Transferred	3/15/2004	FOST 6 (Track 0)	OTH-207H	Sites 16/17	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L5.9.1.1	23.13	Marina	Transferred	4/30/1998	Marina Equestrian	OTH-020B		CERFA Report FOST UCMBEST Phases IIA and III	BW-1658 OTH-020B	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-112	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.9.1.2	4.12	Marina	Transferred	4/30/1998	Marina Equestrian	OTH-020B		CERFA Report FOST UCMBEST Phases IIA and III	BW-1658 OTH-020B	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-112	Yes: Groundwater Restriction	Yes: provided in the deed.
L5.9.2	3.22	FORA	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 0 Plug-in Group D Track 1 Plug-in Groups 1-5	OE-0587 OE-0591H	6/27/2006 7/21/2006	OE-0587D.1 OE-0591F.1	Yes: Groundwater Restriction	Yes: provided in the deed.
L6.1	13.27	Monterey Peninsula Regional Park District	Transferred	7/10/2009	FOST 10 (Track 0 Grp D, Track 1 EG 2/4, Track 1 Grps 1-5)	OTH-232H		Track 1 Plug-in Groups 1-5	OE-0591H	7/21/2006	OE-0591F.1	No	Yes: provided in the deed.
L6.2	6.91	FORA	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J		ESCA Group 3 ROD	ESCA-0293	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: modification to deed in progress.
L7.1	19.11	MPUSD (Monterey Peninsula Unified School District)	Transferred	7/15/1995	MPUSD Phase I	OTH-003		FOST MPUSD Phase I Track 1 Plug-in MRS-6EXP	OTH-003 OE-0529	EPA comment on FOST 6/20/2005	OTH-061 OE-0529D.1	Residential Use Restriction Site Access Restriction	Yes: provided in the deed.

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L7.2	12.94	MPUSD (Monterey Peninsula Unified School District)	Transferred	2/2/1996	MPUSD Phase II	OTH-075E		CERFA Report FOST MPUSD Phase II	BW-1658 OTH-075B	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4)	BW-1658A OTH-072	No	Yes: provided in the deed.
L7.3	15.11	MPUSD (Monterey Peninsula Unified School District)	Transferred	7/15/1995	MPUSD Phase I	OTH-003		CERFA Report FOST MPUSD Phase I	BW-1658 OTH-003	EPA concurrence on CERFA uncontaminated EPA comment on FOST	BW-1658A OTH-061	No	Yes: provided in the deed.
L7.4	10.67	MPUSD (Monterey Peninsula Unified School District)	Transferred	7/15/1995	MPUSD Phase I	OTH-003		FOST MPUSD Phase I Track 1 ROD	OTH-003 OE-0526	EPA comment on FOST EPA signature of ROD	OTH-061 --	No	Yes: provided in the deed.
L7.5	40.1	MPUSD (Monterey Peninsula Unified School District)	Transferred	7/15/1995	MPUSD Phase I	OTH-003		CERFA Report FOST MPUSD Phase I	BW-1658 OTH-003	EPA concurrence on CERFA uncontaminated EPA comment on FOST	BW-1658A OTH-061	No	Yes: provided in the deed.
L7.6	15.13	MPUSD (Monterey Peninsula Unified School District)	Transferred	7/15/1995	MPUSD Phase I	OTH-003		CERFA Report FOST MPUSD Phase I	BW-1658 OTH-003	EPA concurrence on CERFA uncontaminated EPA comment on FOST	BW-1658A OTH-061	No	Yes: provided in the deed.
L7.7	28.96	MPUSD (Monterey Peninsula Unified School District)	Transferred	2/2/1996	MPUSD Phase II	OTH-075E		CERFA Report FOST MPUSD Phase II Track 1 ROD	BW-1658 OTH-075B OE-0526	EPA concurrence on CERFA uncontaminated EPA concurrence on 120(h)(4) EPA signature of ROD	BW-1658A OTH-072 --	No	Yes: provided in the deed.
L7.8	0.32	FORA	Transferred	12/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L7.9	0.32	FORA	Transferred	12/15/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
L9.1.1.1	2.29	Veterans Transition Center	Transferred	10/19/1998	Vietnam Veterans	OTH-091A		EBS McKinney Homeless Act Group Version 2 CERFA Report (4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Vietnam Veterans Track 1 ROD	OTH-028 BW-1658 OTH-091A OE-0526	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST EPA signature of ROD	OTH-1057 BW-1658A OTH-114 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L9.1.1.2	2.24	Veterans Transition Center	Transferred	9/5/2007	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		EBS McKinney Homeless Act Group Version 2 CERFA Report FOST Vietnam Veterans Track 0 Plug-in Group C Track 1 ROD	OTH-028 BW-1658 OTH-091A OE-0527C OE-0526	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST 7/19/2005 EPA signature of ROD	OTH-1057 BW-1658A OTH-114 OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L9.1.2.1	3.47	Veterans Transition Center	Transferred	10/19/1998	Vietnam Veterans	OTH-091A		EBS McKinney Homeless Act Group Version 2 CERFA Report (4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Vietnam Veterans	OTH-028 BW-1658 OTH-091A	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST	OTH-1057 BW-1658A OTH-114	Yes: Groundwater Restriction	Yes: provided in the deed.
L9.1.2.2	2.38	Veterans Transition Center	Transferred	9/5/2007	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		EBS McKinney Homeless Act Group Version 2 CERFA Report FOST Vietnam Veterans Track 0 Plug-in Group C Track 1 ROD	OTH-028 BW-1658 OTH-091A OE-0527C OE-0526	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST 7/19/2005 EPA signature of ROD	OTH-1057 BW-1658A OTH-114 OE-0527F.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
L9.2.1	3.61	Veterans Transition Center	Transferred	10/19/1998	Vietnam Veterans	OTH-091A		EBS McKinney Homeless Act Group Version 2 CERFA Report (4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Vietnam Veterans	OTH-028 BW-1658 OTH-091A	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST	OTH-1057 BW-1658A OTH-114	Yes: Groundwater Restriction	Yes: provided in the deed.

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L9.2.2	0.46	Veterans Transition Center	Transferred	10/19/1998	Vietnam Veterans	OTH-091A		EBS McKinney Homeless Act Group Version 2 CERFA Report (4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Vietnam Veterans	OTH-028 BW-1658 OTH-091A	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST	OTH-1057 BW-1658A OTH-114	Yes: Groundwater Restriction	Yes: provided in the deed.
L9.3	1.05	Veterans Transition Center	Transferred	10/19/1998	Vietnam Veterans	OTH-091A		EBS McKinney Homeless Act Group Version 2 CERFA Report (4) (None of the munitions related sites listed in Table 5-1 is located within this parcel.) FOST Vietnam Veterans	OTH-028 BW-1658 OTH-091A	EPA comment on EBS EPA concurrence on CERFA EPA letter on FOST	OTH-1057 BW-1658A OTH-114	Yes: Groundwater Restriction	Yes: provided in the deed.
S1.1.1	90.73	CSUMB	Transferred	8/19/1994	CSUMB Phase I	OTH-002		EBS CERFA FOST CSU Phase I	OTH-103A BW-1658 OTH-002	-- EPA concurrence on CERFA EPA concurrence on 120(h)(3)	-- BW-1658A OTH-002B	No	Yes: provided in the deed.
S1.1.2	126.8	CSUMB	Transferred	8/19/1994	CSUMB Phase I	OTH-002	Site 23	EBS CERFA FOST CSU Phase I	OTH-103A BW-1658 OTH-002	-- EPA concurrence on CERFA EPA concurrence on 120(h)(3)	-- BW-1658A OTH-002B	No	Yes: provided in the deed.
S1.1.3	6.52	CSUMB	Transferred	8/19/1994	CSUMB Phase I	OTH-002	Site 22	EBS CERFA FOST CSU Phase I	OTH-103A BW-1658 OTH-002	-- EPA concurrence on CERFA EPA concurrence on 120(h)(3)	-- BW-1658A OTH-002B	No	Yes: provided in the deed.
S1.2.1	406.2	CSUMB	Transferred	8/19/1994	CSUMB Phase I	OTH-002	Site 26	Track 1 ROD	OE-0526	EPA signature of ROD		No	Yes: provided in the deed.
S1.2.2	20.28	CSUMB	Transferred	9/15/1997	CSUMB Fredricks & Parcel B	OTH-022A		CERFA Report FOST CSUMB Phase II Parcels 8 and Fredericks Park	BW-1658 OTH-022A	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-084	Yes: Groundwater Restriction	Yes: provided in the deed.
S1.3.1	38.18	CSUMB	Transferred	8/22/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	Site 22	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-00-548 (entire parcel).
S1.3.2	332.84	FORA-CSUMB	Transferred	5/8/2009	FOSET 5 (ESCA and Non-ESCA OUCTP)	FOSET-004J	Site 39B	ESCA Group 2 ROD	ESCA-0298	9/27/2018	ESCA-0363	Yes: Excavation Restriction	Pending: FORA requested warranty 9/11/2019.
S1.3.3	9.27	CSUMB	Transferred	10/16/2003	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S1.4	90.49	CSUMB	Transferred	8/22/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	Site 23 Site 24	Track 0 ROD	OE-0406	EPA signature of ROD		No	Yes: in Amendment No. 1 to Deed No. DACA05-9-00-548 (entire parcel).
S1.5.1.1	96.3	CSUMB	Transferred	8/22/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	Site 14 Site 18 Site 38 Sites 16/17	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-00-548 (entire parcel).
S1.5.1.2	11.71	CSUMB	Transferred	10/16/2003	FOST 6 (Track 0)	OTH-207H	Sites 16/17	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S1.5.2	18.39	CSUMB	Transferred	8/22/2002	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	Site 14 Site 15	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-00-548 (entire parcel).
S1.6	34.39	CSUMB	Transferred	9/15/1997	CSUMB Fredricks & Parcel B	OTH-022A	Site 20	CERFA Report FOST CSUMB Phase II Parcels 8 and Fredericks Park	BW-1658 OTH-022A	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-084	Yes: Groundwater Restriction	Yes: provided in the deed.
S1.7	7.56	CSUMB	Transferred	2/9/1998	CSUMB Parcel 9	OTH-234	Site 14	CERFA Report FOST CSUMB Parcel 9	BW-1658 OTH-234	EPA concurrence on CERFA EPA concurrence on 120(h)(3)	BW-1658A OTH-079	Yes: Groundwater Restriction	Yes: provided in the deed.

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S2.1.1	34.32	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205	Site 34B	EBS CERFA Report (56) (None of the sites listed in Table 5-1 for Parcel 56 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205			No	Yes: provided in the deed.
S2.1.1.1	5.26	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (56) (None of the sites listed in Table 5-1 for Parcel 56 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205			No	Yes: provided in the deed.
S2.1.1.2	1.64	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (56, 221) (None of the sites listed in Table 5-1 for Parcel 56 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (221)	-- BW-1658A	No	Yes: provided in the deed.
S2.1.2	46.32	UCMBEST	In Progress		FOST12	OTH-259	OU1	Track 0 Plug-in Group C	OE-0527C	7/19/2005	OE-0527F.1		Pending
S2.1.3	14.48	UCMBEST	Transferred	6/28/2004	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J	Site 35	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-97-599 (entire parcel).
S2.1.4.1	11.95	UCMBEST	Transferred	6/28/2004	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-97-599 (entire parcel).
S2.1.4.2	3.62	UCMBEST	Transferred	3/3/2011	FOST 6 (Track 0)	OTH-207H	Site 34	Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S2.1.5	343.48	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205	OU1	EBS CERFA Report (221, 56, 57) (None of the sites listed in Table 5-1 for Parcel 56/57 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (221)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.1.5.1	5.06	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (56) (None of the sites listed in Table 5-1 for Parcel 56 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205			No	Yes: provided in Section 23 of deed.
S2.1.7	1.34	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (56) (None of the sites listed in Table 5-1 for Parcel 56 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205			No	Yes: provided in Section 23 of deed.
S2.2.1	269.73	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (221, 75) (Parcel 75 is identified as containing FAAF 3.5-in. Rocket Site. No such site was identified in the Archive Search Reports for munitions.) FOST UC Phase I	OTH-102 OTH-205	-- EPA concurrence on CERFA uncontaminated (221)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.1.1	37.36	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220, 58) (None of the sites listed in Table 5-1 for Parcel 58 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.1.2	11.53	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.1.3	0.49	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.

Table 2
NPL Deletion Parcels
Fort Ord, CA

USACE Parcel Number	Acreage	Recipient	Transfer Status	Transfer Date	FOST-FOSET	FOST-FOSET (AR#)	HTW Site in Report	MR Decision Document (or equivalent)	Decision Doc AR#	EPA Letter RA Complete	EPA Letter AR#	Deed Restriction	CERCLA Covenant/Warranty
S2.3.1.4	8.78	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.2.1	36.75	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.2.2	33.12	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.2.3	3.02	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.3.2.4	90.35	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (220, 61, larger parcel) (None of the sites listed in Table 5-1 for Parcel 61 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.4	10.98	UCMBEST	Transferred	8/31/1994	UCSC Phase I	OTH-205		EBS CERFA Report (56) (None of the sites listed in Table 5-1 for Parcel 56 is munitions related) FOST UC Phase I	OTH-102 BW-1658 OTH-205	-- EPA concurrence on CERFA uncontaminated (220)	-- BW-1658A	No	Yes: provided in Section 23 of deed.
S2.5.1.1	15.55	UCMBEST	Transferred	6/28/2004	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-97-599 (entire parcel).
S2.5.1.2	2.21	UCMBEST	Transferred	6/28/2004	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-97-599 (entire parcel).
S2.5.2.1	25.4	UCMBEST	Transferred	6/28/2004	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-97-599 (entire parcel).
S2.5.2.2	3.78	UCMBEST	Transferred	6/28/2004	FOSET 2 (Housing Areas and Former Garrison)	FOSET-002J		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: in Amendment No. 1 to Deed No. DACA05-9-97-599 (entire parcel).
S3.1.1	476.79	Cal Department Parks & Recreation	Transferred	9/29/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	Site 1 Site 4 OF-15 Sites 2/12 Site 3	Track 1 ROD	OE-0526	EPA signature of ROD		Yes: Groundwater Restriction Residential Use Restriction	Yes: provided in the deed.
S3.1.2	468.19	Cal Department Parks & Recreation	Transferred	9/29/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	Site 4 OF-15 Sites 2/12 Site 3	Track 1 ROD	OE-0526	EPA signature of ROD		Yes: Groundwater Restriction Residential Use Restriction	Yes: provided in the deed.
S3.1.3	21.9	Cal Department Parks & Recreation	Transferred	9/29/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G		Track 1 ROD	OE-0526	EPA signature of ROD		Yes: Residential Use Restriction	Yes: provided in the deed.
S3.1.4	12.59	Cal Department Parks & Recreation	Transferred	9/29/2006	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	Site 3	Track 1 ROD	OE-0526	EPA signature of ROD		Yes: Residential Use Restriction	Yes: provided in the deed.
S3.2.1	11.28	Seaside	Transferred	8/28/2008	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
S3.2.2	0.09	Seaside	Transferred	8/28/2008	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.

Table 2
NPL Deletion Parcels
Fort Ord, CA

USACE Parcel Number	Acreage	Recipient	Transfer Status	Transfer Date	FOST-FOSET	FOST-FOSET (AR#)	HTW Site in Report	MR Decision Document (or equivalent)	Decision Doc AR#	EPA Letter RA Complete	EPA Letter AR#	Deed Restriction	CERCLA Covenant/Warranty
S4.1.1	72.14	Caltrans	Transferred	8/8/2007	FOST 9 (Track 0 Plug-in "C" and Track 1 Parcels)	OTH-223G	Site 28	Track 0 Plug-in Group C Track 1 Plug-in MRS-6EXP Track 1 ROD	OE-0527C OE-0529 OE-0526	7/19/2005 6/20/2005 EPA signature of ROD	OE-0527F.1 OE-0529D.1 --	Yes: Groundwater Restriction	Yes: provided in the deed.
S4.1.2.1	148.51	Caltrans	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S4.1.2.2	0.15	Caltrans	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S4.1.3	0.24	Caltrans	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S4.1.4	0.41	Caltrans	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S4.1.5	5.78	Caltrans	Transferred	9/1/2004	FOST 6 (Track 0)	OTH-207H		Track 0 ROD	OE-0406	EPA signature of ROD		Yes: Groundwater Restriction	Yes: provided in the deed.
S4.2.1	37.26	Caltrans	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
S4.2.2	1.01	Caltrans	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
S4.2.3	14.01	Caltrans	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
S4.2.4	25.73	Caltrans	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.
S4.3	1.34	Caltrans	Transferred	3/15/2006	FOST 8 (Track 0 and Track 0 Plug-in "B" Parcels)	OTH-222E		Track 0 Plug-in Group B	OE-0525F	6/7/2005	OE-0525J.1	No	Yes: provided in the deed.

Parcel search tool at fortordcleanup.com/parcel-search-tool
Document search tool at fortordcleanup.com/documens/search

Table 3
NPL Deletion Parcels with
CERCLA Warranty Pending
Fort Ord, CA

FOST-11		
L2.3		
L2.4.1		
FOST-12		
E20c.1		
S2.1.2		
FOSET-1		
L5.1.1	L5.1.3	L5.1.7
L5.1.1.1	L5.1.4	L5.1.9
L5.1.10	L5.1.5	L5.2
L5.1.2	L5.1.6	L5.3
FOSET-4		
E29a	E31b	
E29b.1	E31c	
E31a	E36	
FOSET-5-OUCTP		
Marina	County	
E4.3.2.2	E4.7.2	
E4.7.1		
E5a.1		
L5.10.1		
FOSET-5-California State University Monterey Bay		
S1.3.2		
FOSET-5-Monterey Peninsula College		
Group 1	Group 3	Interim Action Ranges MRA
E21b.3	F1.7.2	E38
L23.2		E39
		E40
		E41
		E42
FOSET-5-City of Monterey		
E29.1		
FOSET-5-County of Monterey		
Group 1	Group 3	Group 4
E18.1.2	L20.3.1	E11b.6.1
E19a.1	L20.3.2	E11b.7.1.1
E19a.2	L20.5.1	E11b.8
E19a.3	L20.5.2	L20.19.1.1
E19a.4	L20.5.3	
L20.18	L20.5.4	
	L20.8	
FOSET-5-City of Del Rey Oaks		
L20.13.1.2		
L20.13.3.1		
L6.2		
FOSET-5-City of Seaside		
E18.1.1	E20c.2	E24
E18.1.3	E23.1	E34
E18.4	E23.2	

Additional parcel information is provided in Table 2.

Appendix A

Acronym List

AOC	Administrative Order on Consent
ACL	aquifer cleanup level
AFFF	aqueous film-forming foam
A.R.	automatic rifle
AR	Administrative Record
ARAR	applicable or relevant and appropriate requirement
Army	U.S. Department of the Army
AST	aboveground storage tank
BCT	Base Realignment and Closure Cleanup Team
BEHP	bis(2-ethylhexyl) phthalate
bgs	below ground surface
BLM	Bureau of Land Management
BRA	Basewide Range Assessment
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene and xylene
CalEPA	California Environmental Protection Agency
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CERFA	Community Environmental Response Facilitation Act
COC	chemical of concern
COPC	chemical of potential concern
CRUP	covenant to restrict the use of property
CRWQCB	California Central Coast Regional Water Quality Control Board
CSUMB	California State University Monterey Bay
CT	carbon tetrachloride
cy	cubic yard
DCE	trans-1,2-dichloroethene
DGM	digital geophysical mapping
DoD	Department of Defense
DOL	Directorate of Logistics
DPR	California Department of Parks and Recreation
DRMO	Defense Reutilization and Marketing Office
DTSC	California Department of Toxic Substances Control
EDC	Economic Development Conveyance
EISB	enhanced in situ bioremediation
EPA	U.S. Environmental Protection Agency
EPP	environmental protection provisions
ERA	Ecological Risk Assessment
ESCA	Environmental Services Cooperative Agreement
ESD	explanation of significant differences
FAAF	Fritzsche Army Airfield
FDA	Fire Drill Area
FFA	Federal Facility Agreement
FORA	Fort Ord Reuse Authority
FOSET	finding of suitability for early transfer
FOST	finding of suitability to transfer

Acronym List

FOSTA	Fort Ord Soil Treatment Area
FS	Feasibility Study
GAC	granular activated carbon
GWETS	groundwater extraction and treatment system
HA	Historical Area
HDPE	high-density polyethylene
HHRA	human health risk assessment
HLA	Harding Lawson Associates
HMP	Installation-Wide Multispecies Habitat Management Plan
HTW	hazardous and toxic waste
IA	Interim Action
IAROD	Interim Action Record of Decision
IRP	Installation Restoration Program
LAW	light anti-tank weapon
LUC	land use control
MCL	maximum contaminant level
MEC	munitions and explosives of concern
MEK	methyl ethyl ketone
mg/kg	milligrams per kilogram
MGSTP	Main Garrison Sewage Treatment Plant
MMRP	Military Munitions Response Program
MNA	monitored natural attenuation
MOU	Military Operations in Urban Terrain
MP/CID	Military Police/Criminal Investigation Division
MRA	munitions response area
MRS	munitions response site
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
ND	non-detect
NFA	No Further Action
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NRMA	Natural Resource Management Area
NWTS	Northwest Treatment System
O&M	operations and maintenance
OEHHA	California Office of Environmental Health Hazard Assessment
OF	outfall
OPS	operating properly and successfully
OU	operable unit
OUCTP	Operable Unit Carbon Tetrachloride Plume
PAH	polynuclear aromatic hydrocarbon
PBC	Public Benefit Conveyance
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PFAS	perfluoroalkyl substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonate
POM	Presidio of Monterey

Acronym List

POTW	publicly owned treatment works
ppbv	parts per billion by volume
PRG	preliminary remediation goal
PRHRA	Post-Remediation Health Risk Assessment
QAPP	quality assurance project plan
RA	Remedial Action
RACR	Remedial Action Completion Report
RAO	Remedial Action Objectives
RAWP	Remedial Action Work Plan
RD	Remedial Design
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RQA	Residential Quality Assurance
SG-CL	soil gas cleanup level
SGMP	soil gas monitoring program
Sites 2/12	Sites 2 and 12
SOP	standard operating procedure
SRC	site-related chemicals
SRE	screening risk evaluation
SRU	soil remedial unit
SVE	soil vapor extraction
SVETS	soil vapor extraction and treatment system
SVOC	semivolatile organic compound
SVTU	soil vapor treatment unit
SWMU	Solid Waste Management Unit
TCC	target cleanup concentration
TCE	trichloroethene
TCRA	Time-Critical Removal Action
TNT	trinitrotoluene
TOC	total organic carbon
TPH	total petroleum hydrocarbons
TRPH	total recoverable petroleum hydrocarbons
U.S.	United States
USACE	United States Army Corps of Engineers
USRA	Underground Storage Tank Soil Remediation Area
UST	underground storage tank
UXO	unexploded ordnance
VOC	volatile organic compound

Appendix B

**Table 2
HTW Site Summary
Former Fort Ord, California**

Site Number	Site Name	Record of Decision (ROD)	Completed in 1st 5-Year Review (2001)	Completed in 2nd 5-Year Review (2007)	Completed in 3rd 5-Year Review (2012)	Completed in 4th 5-Year Review (2017)	Ongoing
1	Ord Village Sewage Treatment Plant	Interim Action Sites ROD		X			
2	Main Garrison Sewage Treatment Plant	Basewide Remedial Investigation Sites ROD					X
3	Beach Trainfire Ranges					X	
4	Beach Stormwater Outfalls	Basewide Remedial Investigation Sites ROD	X				
5	Range 36A (within Site 39)	Basewide Remedial Investigation Sites ROD	X				
6	Range 39, Abandoned Car Dump	Interim Action Site			X		
7	Ranges 40 and 41 (within Site 39)	Basewide Remedial Investigation Sites ROD					X
8	Range 49, Molotov Cocktail Range	Interim Action Sites ROD		X			
9	Range 40A (within Site 39)	Basewide Remedial Investigation Sites ROD					X
10	Burn Pit	Interim Action Sites ROD		X			
11	Army and Air Force Exchange Service Fueling Station	No Action Sites ROD	X				
12	Lower Meadow Disposal Area	Basewide Remedial Investigation Sites ROD					X
13	Railroad Right-	No Action	X				

**Table 2
HTW Site Summary
Former Fort Ord, California**

Site Number	Site Name	Record of Decision (ROD)	Completed in 1st 5-Year Review (2001)	Completed in 2nd 5-Year Review (2007)	Completed in 3rd 5-Year Review (2012)	Completed in 4th 5-Year Review (2017)	Ongoing
	of-Way	Sites ROD					
14	707th Maintenance Facility	Interim Action Sites ROD	X				
15	Directorate of Engineering and Housing (DEH) Yard	Interim Action Sites ROD	X				
16	DOL Maintenance Yard	Basewide Remedial Investigation Sites ROD	X				
17	Disposal Area, 1400 Block Motor Pool	Basewide Remedial Investigation Sites ROD	X				
18	1600 Block Facility	No Action Sites ROD	X				
19	2200 Block Facility	No Action Sites ROD	X				
20	South Parade Ground and 3800 and 519th Motor Pools	Interim Action Sites ROD	X				
21	4400/4500 Block Motor Pool East	Interim Action Sites ROD		X			
22	4400/4500 Block Motor Pool West	Interim Action Sites ROD	X				
23	3700 Block Motor Pool Complex	No Action Sites ROD	X				
24	Old Directorate of Engineering and Housing (DEH) Yard	Interim Action Sites ROD	X				
25	Former Defense Reutilization Marketing Office	Basewide Remedial Investigation Sites ROD	X				
26	Sewage Pump Stations, Buildings	No Action Sites ROD	X				

**Table 2
HTW Site Summary
Former Fort Ord, California**

Site Number	Site Name	Record of Decision (ROD)	Completed in 1st 5-Year Review (2001)	Completed in 2nd 5-Year Review (2007)	Completed in 3rd 5-Year Review (2012)	Completed in 4th 5-Year Review (2017)	Ongoing
	5871 and 6143						
27	Army Reserve Motor Pool	No Action Sites ROD	X				
28	Barracks and Main Garrison Area	No Action Sites ROD	X				
29	Defense Reutilization Marketing Office	No Action Sites ROD	X				
30	Driver Training Area	Interim Action Sites ROD		X			
31	Former Dump Site	Basewide Remedial Investigation Sites ROD					X
32	East Garrison Sewage Treatment Plant	Interim Action Sites ROD		X			
33	Golf Course Maintenance Area	Basewide Remedial Investigation Sites ROD					X
34	Fritzsche Army Airfield (FAAF) Fueling Facility	Interim Action Sites ROD		X			
34B	Former Burn Pit	Interim Action Sites ROD			X		
35	FAAF Aircraft Cannibalization Yard	No Action Sites ROD	X				
36	FAAF Sewage Treatment Plant	Interim Action Sites ROD	X				
37	Trailer Park Maintenance Shop	No Action Sites ROD	X				
38	Army and Air Force Exchange Service Dry Cleaners	No Action Sites ROD	X				

Table 2
HTW Site Summary
Former Fort Ord, California

Site Number	Site Name	Record of Decision (ROD)	Completed in 1st 5-Year Review (2001)	Completed in 2nd 5-Year Review (2007)	Completed in 3rd 5-Year Review (2012)	Completed in 4th 5-Year Review (2017)	Ongoing
39	Inland Ranges	Basewide Remedial Investigation Sites ROD					X
39A	East Garrison Ranges	Interim Action Sites ROD		X			
39B	Inter-Garrison Training Area	Interim Action Sites ROD			X		
40	FAAF Helicopter Defueling Area	Interim Action Sites ROD				X	
41	Crescent Bluff Fire Drill Area	Interim Action Sites ROD				X	
OF-15	Outfall 15	Interim Action Sites ROD				X	
OF34/35	Outfalls 34 and 35	Interim Action Sites ROD	X				

Notes:

DEH = Directorate of Engineering and Housing
FAAF = Fritzsche Army Airfield
HTW = Hazardous and Toxic Waste
OF = Outfall
ROD = Record of Decision

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION		
Site Name: Fort Ord		
EPA ID: CA7210020676		
Region: 9	State: CA	City/County: Marina / Monterey
SITE STATUS		
NPL Status: Final		
Multiple OUs? Yes	Has the site achieved construction completion? No	
REVIEW STATUS		
Lead agency: Other Federal Agency If "Other Federal Agency" was selected above, enter Agency name: U.S. Department of the Army		
Author name (Federal or State Project Manager): William K. Collins		
Author affiliation: U.S. Department of the Army		
Review period: 10/1/2011 - 9/30/2016		
Date of site inspection: 7/12/2016 through 10/17/16		
Type of review: Statutory		
Review number: 4		
Triggering action date: 9/25/2012		
Due date (five years after triggering action date): 9/25/2017		

Five-Year Review Summary Form (Continued)

Issues/Recommendations		Protectiveness Statements
Issues and Recommendations Identified in the Five-Year Review and Sites/Operable Units (OUs) without Issues/Recommendations Identified in the Five-Year Review		
OU(s): Section 5: OU 1 — Fritzsche Army Airfield Fire Drill Area	There are no issues affecting the protectiveness of the remedy at OU 1.	<i>Protectiveness Statement:</i> Protective. The remedy at OU 1 is protective of human health and the environment. The remedial action objectives stipulated in the 1995 Record of Decision (ROD) and 2010 Explanation of Significant Differences (ESD) have been achieved.
OU(s): Section 6: OU 2 – Fort Ord Landfills	There are no issues affecting the protectiveness of the remedy at OU 2. Additionally, this assessment did not identify any unresolved issues previously raised by regulatory agencies, the community, or other interested parties.	<i>Protectiveness Statement:</i> Protective. The remedies at OU 2 are protective of human health and the environment. The ongoing remedial activities continue to adequately address all exposure pathways that could result in unacceptable risks. During the course of the remediation process, potential environmental and human health concerns are being addressed by mitigation measures, such as control and treatment of landfill gases. The soil vapor exposure pathway is being controlled by the on-going groundwater remedy (which includes soil gas extraction and granular activated carbon [GAC] treatment). Potential exposure pathways are also being controlled by the restrictions of Chapter 15.08 of Title 15, Monterey County Code, and the Covenant to Restrict Use of Property (CRUP).
OU(s): Section 7.1: Basewide Remedial Investigation (RI) Sites – Site 2 – Main Garrison Sewage Treatment Plant and Site 12 - Lower Meadow Disposal Area, Directorate of Logistics (DOL) Automotive Yard, Cannibalization Yard, and Southern Pacific Railroad Spur	This technical assessment did not identify any issues that affect current or future protectiveness of the Sites 2 and 12 groundwater remedy.	<i>Protectiveness Statement:</i> Protective. The remedies at Sites 2 and 12 are protective of human health and the environment. The remedial activities completed to date have adequately addressed all exposure pathways that could result in unacceptable risks in these areas. Pathways are being controlled by groundwater use restrictions, modifications to the groundwater remedy (including soil vapor extraction and treatment), and the presence of Monterey County Ordinance 4011 and the CRUP.
OU(s): Section 7.2: Basewide RI Sites – Site 31 – Former East Garrison Dump Site	There are no issues affecting the protectiveness of the remedy at Site 31.	<i>Protectiveness Statement:</i> Protective. The remedy at Site 31 is protective of human health and the environment. The successful completion of the remedy establishes that the site is protective of human health and the environment. The land use restrictions incorporated into the Quitclaim Deed and CRUP apply to the entire site and run with the land ensuring protectiveness.
OU(s): Section 7.3: Basewide RI Sites – Site 39 – Inland Ranges	There are no issues affecting the protectiveness of the remedy at Site 39.	<i>Protectiveness Statement:</i> Protective. The overall remedy at Site 39 is protective of human health and the environment. The long-term protectiveness at sites Historical Area (HA)-18D and HA-23D for potential future residential development is being further evaluated as indicated in Section 7.3.8 of this Five-Year Review Report.

Issues/Recommendations		Protectiveness Statements
Issues and Recommendations Identified in the Five-Year Review and Sites/Operable Units (OUs) without Issues/Recommendations Identified in the Five-Year Review		
OU(s): Section 7.4: Basewide RI Sites – Site 33 - Golf Course Maintenance Area	There are no issues affecting the protectiveness of the remedy at Site 33.	<i>Protectiveness Statement:</i> Protective. The remedy at Site 33 is protective of human health and the environment. The remedy is protective and is consistent with the designated uses for the property. Potential exposure pathways that could result in unacceptable risks are being controlled by the land use controls (LUCs).
OU(s): Section 8: Site 3 – Beach Trainfire Ranges	There are no issues affecting the protectiveness of the remedy at Site 3.	<i>Protectiveness Statement:</i> Protective. The remedy at Site 3 is protective of human health and the environment. Ecological monitoring indicates no adverse ecological impacts at the site. The LUCs and access restrictions in effect for the State Park continue to provide human health protection.
OU(s): Section 9: Interim Action (IA) Sites – Contaminated Surface Soil Remediation	There are no issues affecting the protectiveness of the remedy at the IA Sites.	<i>Protectiveness Statement:</i> Protective. The remedy at the IA sites is protective of human health and the environment. Regulatory concurrence of the confirmation reports and the results of the reevaluation of lead at the fourteen lead-impacted sites clarifies that the remedy has performed as intended, RAOs have been achieved, and the remedy remains protective of human health and the environment.
OU(s): Section 10: Operable Unit Carbon Tetrachloride Plume (OUCTP)	There are no issues affecting the protectiveness of the remedy at OUCTP.	<i>Protectiveness Statement:</i> Will be Protective. The remedy at OUCTP is expected to be protective of human health and the environment upon completion. In the interim, ongoing remedial activities and groundwater use prohibitions continue to adequately address all exposure pathways that could result in unacceptable risks. Specific controls include groundwater prohibitions provided by Chapter 15.08 of Title 15, Monterey County Code, deed restrictions, and the CRUP.
OU(s): Section 12: Track 1 Sites	There are no issues affecting the protectiveness of the remedy at the Track 1 sites.	<i>Protectiveness Statement:</i> Protective. The remedy at the Track 1 sites is protective of human health and the environment. The No Further Action remedy allows for unrestricted use.
OU(s): Section 13: Track 2 Parker Flats Munitions Response Area (MRA)	<u>Army Parcels:</u> There are no unresolved issues in relation to parcels F2.6, L2.3, and L2.4.1 that have been identified in regard to the protectiveness of human health and the environment. <u>Environmental Services Cooperative Agreement (ESCA) Parcels:</u> No new issues affecting the protectiveness of the remedy at Parker Flats MRA Phase I have been identified.	<i>Protectiveness Statement:</i> Protective. The remedy for the Track 2 Parker Flats MRA is protective of human health and the environment. Remedial actions have been completed at the MRA. Furthermore, protectiveness is assured by long-term management measures including: implementing, monitoring, and enforcing the selected LUCs.

Issues/Recommendations		Protectiveness Statements
Issues and Recommendations Identified in the Five-Year Review and Sites/Operable Units (OUs) without Issues/Recommendations Identified in the Five-Year Review		
OU(s): Section 14: IA Munitions Response Sites (MRSs) - Ranges 43-48, Range 30A, and MRS-16	There are no issues affecting the protectiveness of the IA Sites MR ROD remedy.	<i>Protectiveness Statement:</i> Protective. The remedy at the IA MRSs is protective of human health and the environment. Selection of final remedies for the three Interim Action sites, Ranges 43-48, Range 30A, and MRS-16, has completed the interim action program under the 2002 IA Sites MR ROD. The interim action MR sites will not be reviewed again in future five-year reviews.
Section 15: Track 3 Impact Area MRA	There are no issues affecting the protectiveness of the Track 3 Impact Area MRA remedy.	<i>Protectiveness Statement:</i> Will be Protective. The remedy at the Track 3 Impact Area MRA is expected to be protective of human health and the environment upon completion. In the interim, ongoing remedial activities, along with access controls, adequately address all exposure pathways that could result in unacceptable risks. Specific controls include: security patrols; munitions and explosives of concern (MEC) recognition and safety training for authorized personnel; fencing, gate, and signage upkeep; and annual monitoring.
OU(s): Section 16: Track 2 Del Rey Oaks (DRO) MRA	There are no issues affecting the protectiveness of the Track 2 DRO remedy.	<i>Protectiveness Statement:</i> Protective. The remedy at the DRO MRA is protective of human health and the environment. Remedial actions have been completed at the MRA. Furthermore, protectiveness is assured by long-term management measures including: implementing, monitoring, and enforcing the selected LUCs.
Section 18: BLM Area B and MRS-16	There are no issues affecting the protectiveness of the selected remedy.	<i>Protectiveness Statement:</i> Will be Protective. The remedy for BLM Area B and MRS-16 is expected to be protective of human health and the environment upon implementation.
OU(s): Section 20: ESCA Group 2	There are no issues affecting the protectiveness of the remedy at the ESCA Group 2 California State University Monterey Bay (CSUMB) Off-Campus MRA.	<i>Protectiveness Statement:</i> Protective. The remedy at the ESCA Group 2 areas is protective of human health and the environment. Potential exposure pathways that could result in unacceptable risks are being controlled.
OU(s): Section 21: ESCA Group 3	There are no issues affecting the protectiveness of the remedy at the ESCA Group 3 areas which include the Del Rey Oaks/Monterey MRA, Laguna Seca Parking MRA, and Military Operations in Urban Terrain (MOUT) Site MRA.	<i>Protectiveness Statement:</i> Protective. The remedy at the ESCA Group 3 areas is protective of human health and the environment. Potential exposure pathways that could result in unacceptable risks are being controlled.

Acronyms used in Summary Table:

CA	California	ESD	Explanation of Significant Differences	MRA	Munitions Response Area
CRUP	Covenant to Restrict Use of Property	GAC	Granular activated carbon	MRS	Munitions Response Site
CSUMB	California State University Monterey Bay	HA	Historical Area	OU	Operable Unit
DOL	Directorate of Logistics	IA	Interim Action	OUCTP	Operable Unit Carbon Tetrachloride Plume
DRO	Del Rey Oaks	ID	identification	RI	Remedial Investigation
ESCA	Environmental Services Cooperative Agreement	MEC	munitions and explosives of concern	ROD	Record of Decision
EPA	U.S. Environmental Protection Agency	MOUT	Military Operations in Urban Terrain	U.S.	United States

Appendix F Agency Requests

Appendix G Agency Requests



Yana Garcia
Secretary for
Environmental Protection



Department of Toxic Substances Control

Meredith Williams, Ph.D.
Director
8800 Cal Center Drive
Sacramento, California 95826-3200



Gavin Newsom
Governor

April 11, 2023

Daisy Pineda
Kimley-Horn
Daisy.Pineda@kimley-horn.com

Public Records Request Number: 1-041023-02
Location(s): APN: 031-151-012-00, Seaside, CA

Dear Requestor:

On April 10, 2023 the Department of Toxic Substances Control (DTSC) received your email of April 10, 2023 requesting records under the Public Records Act. We were unable to locate an address in the county database using the APNs provided and we are unable to search our records using APNs as our databases do not include this information. If you have a specific address or cross streets, please let us know.

A large number of our records are available on EnviroStor, an online database that provides non-confidential, public access to DTSC's data management system. It tracks our cleanup, permitting, enforcement, and investigation efforts at hazardous waste facilities and sites with known or suspected contamination issues. EnviroStor is available 24/7, 365 days a year. The data reflects the latest updates as they are entered in the system. Access it from your computer or smartphone, the local library – anywhere Internet access is available. Just go to www.envirostor.dtsc.ca.gov. You'll find a step-by-step tour of EnviroStor under the "How to Use EnviroStor" menu on the website.

If you have any questions or would like further information regarding your request, please contact me at 916-255-4159 or via email at PubReqAct@dtsc.ca.gov.

Sincerely,
Julee Moua
Julee Moua
Regional Records Coordinator

From: [Pineda, Daisy](#)
To: [Bretschger, Cassie](#)
Subject: FW: AM0000772: UST's/AST's/Hazardous Materials files ONLY
Date: Tuesday, April 18, 2023 8:46:50 AM
Attachments: [image001.png](#)

From: Ortiz, Linda B. <ortizlb@co.monterey.ca.us>
Sent: Tuesday, April 18, 2023 8:46 AM
To: Pineda, Daisy <Daisy.Pineda@kimley-horn.com>
Cc: McMurray, Randy M. <McMurrayRM@co.monterey.ca.us>
Subject: AM0000772: UST's/AST's/Hazardous Materials files ONLY

You don't often get email from ortizlb@co.monterey.ca.us. [Learn why this is important](#)

Good morning-

We did not locate any UST's/AST's/Hazardous Materials files for APN is 031-151-012-00 and is bordered by Gigling Rd to the South, Cabrillo Hwy to the West, 1st Ave to the East, and Lightfighter Dr to the north. If you have any questions, please reply to this e-mail.

If the records request submitted also included Water Systems/Wells, Septic Systems, Medical Waste/Landfills, Restaurant/ Pools/Spas/Housing complaints AND/OR Recycling & Resource Recovery, please contact our office to follow up with request at (831)755-4505, select option #3.

File Reviews: Please be advised that every effort has been made to provide all the disclosable records which might fall within your inquiry. As such, we believe our reply is quite thorough. However, if you have knowledge of a specific document which has not been provided in response to your inquiry, please notify us and we will be happy to provide the document(s) to you unless, of course, it is exempt from disclosure under applicable law or is no longer a part of our records retention. Please feel free to contact me if you have any questions regarding this response.

Regards,

Linda B. Ortiz

Office Assistant III

Monterey County Health Department

1270 Natividad

Salinas, CA 93906

Main: 831-755-4511

Direct: 831-755-4961 Fax: 831-796-8692

ortizlb@co.monterey.ca.us

Visit our website www.mtyhd.org

Hazardous Material Program: Report your changes through CERS: <https://cers.calepa.ca.gov/>

Follow on Twitter for breaking news & information [@MCHDPIO](https://twitter.com/MCHDPIO)

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COUNTY OF MONTEREY
HEALTH DEPARTMENT
Nationally Accredited for Providing Quality Health Services



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From: [Pineda, Daisy](#)
To: [Bretschger, Cassie](#)
Subject: Fwd: Public Records Request- APN 031-151-012-00
Date: Wednesday, June 7, 2023 2:12:58 PM

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From: Sellinger, Amber@Waterboards <Amber.Sellinger@Waterboards.ca.gov>
Sent: Wednesday, June 7, 2023 2:09:13 PM
To: Pineda, Daisy <Daisy.Pineda@kimley-horn.com>
Cc: Soderberg, Sheila@Waterboards <Sheila.Soderberg@waterboards.ca.gov>
Subject: RE: Public Records Request- APN 031-151-012-00

You don't often get email from amber.sellinger@waterboards.ca.gov. [Learn why this is important](#)

Hi Daisy,

We received your public records act request for APN 031-151-012-00 located at Gigling Road and 1st Avenue in Seaside, California. This property is located within the former Fort Ord boundary but appears to be outside of any current or historical cleanup case. Please review the former Fort Ord case files to confirm this and answer the questions in your initial request regarding past site use/environmental response. Provided below are links where you can find the information requested:

1. Documents associated with Former Fort Ord cleanup can be found at the following link: https://geotracker.waterboards.ca.gov/profile_report.asp?global_id=DOD100196700. Additional former Fort Ord project documents can be found by searching GeoTracker at: <https://geotracker.waterboards.ca.gov/>. Historical paper files related to former Fort Ord are stored in our office and are organized by date rather than address. If you'd like to review the in-house documents and scan or make copies, we can schedule an appointment.
2. The Army is also required to maintain records for former Fort Ord which can be found on the Fort Ord Cleanup Website at: <https://www.fortordcleanup.com/documents/search/>. If you need additional information on the records that the Army maintains you can contact:
Jason No, Fort Ord Outreach Coordinator
Fort Ord Environmental Cleanup Community Relations Office
Phone: 831-393-1284
Email: Outreach@FortOrdCleanup.com.
3. Information on groundwater use restrictions in this area can be found at the following link: http://docs.fortordcleanup.com/ar_pdfs/AR-OUCTP-0036/Appendices/Appendix_E.pdf
4. For information on zoning, I recommend reviewing the case files as well as contacting Monterey County for this information.

Please let me know if you have any questions or need any additional information.

Thank you,

Amber Sellinger, P.G., C.Hg.

Engineering Geologist

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401
Tel: (805) 549-3866 / Fax: (805) 543-0397
Email: Amber.Sellinger@waterboards.ca.gov

From: Pineda, Daisy <Daisy.Pineda@kimley-horn.com>
Sent: Monday, June 5, 2023 10:00 AM
To: WB-RB3-centralcoast <centralcoast@waterboards.ca.gov>
Cc: Bretschger, Cassie <Cassie.Bretschger@kimley-horn.com>
Subject: Public Records Request- APN 031-151-012-00

EXTERNAL:

To Whom It May Concern:

I am writing to submit a request to view public records with the Regional Water Resources Control Board regarding the property identified in the table below. The property is located in the Regional Board: 3/ Central Coast. An aerial image of the specific portion of the parcel that is of interest is attached. The application for public records request is also attached. The parcel is located in the City of Seaside in the County of Monterrey.

APN:	Address:
031-151-012-00	Not Reported

I am seeking the following information for the parcel, any information that could be provided would be greatly appreciated:

1. Do you have any records of fuel or chemical storage at the site? If yes, please provide details (install, removal, size, contents, Closure Assessments, etc.).
2. Do you have any records of hazardous waste disposal at the site?
3. Are you aware of any environmental impacts at the site (chemical or petroleum spills, releases, etc.)?
4. Has your agency been called to the site for an environmental emergency?
5. Do you know whether there are any groundwater use restrictions or other environmentally related activity and use restrictions at or near the site?

6. Do you know the past use of the site?
7. When were the current structures constructed? What is their approximate square-footage?
8. What is the current zoning of the site? What is the past zoning of the site?

Please contact me via email at daisy.pineda@kimley-horn.com phone at 657.331.4268 if charges will be incurred prior to fulfilling this request. Thank you for your assistance.

Daisy Pineda

Kimley-Horn | 1100 W Town and Country Rd., Suite 700 Orange, CA 92868

Direct: 657 331 4268

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Appendix H Credentials

Cassandra C. Bretschger, M.S., ENV SP

EDUCATION

M.S., Environmental Science and Geographic Information Systems, University of Arizona, Tucson

B.S., Environmental Science, University of Arizona, Tucson

AREAS OF EXPERTISE

Ms. Bretschger has experience in the following general areas:

- Entitlement strategy and processing
- Specific Plans
- Master Plan Development and Land Planning
- Due Diligence
- Regulatory Compliance and Permitting
- Data Validation and Database Management
- Soil / Groundwater Site Investigations and Remediation
- Phase I and II Environmental Site Assessments and Due Diligence
- Geospatial Analysis and Cartography
- Risk Assessment

REPRESENTATIVE EXPERIENCE

Ms. Bretschger is an Environmental Planner and Soil Scientist within Kimley Horn's Orange office. Her responsibilities consist of project management and field support in a wide range of consulting disciplines, project remediation/oversight, entitlement implementation, technical reporting and regulatory compliance at city, county and state levels.

Select Project Experience

Various Clients, CA (2015 – current)

Performed Phase I and II ESA's on multi-acre tracts of undeveloped, residential, commercial, and active industrial land for various clients. Phase I Tasks included: gathering historical data; analyzing database reports and historical documents such as topographic maps, aerial photographs and fire insurance maps; conducting site visits, land-owner, land-occupant interviews; and report writing. Phase II tasks include: budget preparation, field subcontractor coordination, geophysical surveys, drilling, soil vapor installation and risk analysis.

Class I Railroad Various Cities, CA (2016 - ongoing)

Working with both the remediation and real estate departments to carry out client services within the southwest. Remediation Department: Oversight of multiple ongoing remediation programs relating to former railroad fueling/maintenance or acquisition/lease properties. Responsibilities include maintaining groundwater monitoring activities, technical data analysis, analytical data quality analysis, and project reporting Real Estate Department: Complete lease site inspections across the United States documenting environmental compliance and completing Phase I and II ESAs for property acquisitions. As of 2022, working on baseline entitlements for a 4,300 acre site including Specific Plan, Development Agreement and technical reports for CEQA.

Northrup Grumman- Former Major Aerospace Test Facility – Orange County, CA (2015-2016)

GIS Analyst and on-site scientist for soil sampling activities at three former aerospace facilities in southern California. Responsibilities include oversight of drilling activities for all soil vapor probes, lead GIS Analyst for site investigations, semi-annual groundwater monitoring, feasibility testing, remediation implementation, and risk assessment work. Example project included: results for vapor intrusion study input into EVS for 3-D visualization of contamination extent, and identification of targeted remediation areas, which lead to a groundwater remediation strategy report.

Yara International, Southwest - CA, AZ, NM (2011-2014)

Served as project manager (2013-2014) and senior field technician (2011-2013) for three to five sites annually completing validation research implementing Yara products. Responsibilities included oversight of field work, laboratory coordination, bi-weekly field investigations, GIS mapping, report preparation, and internal budgeting/cost tracking.

SPECIALIZED TRAINING

- OSHA 40-Hour Hazardous Waste Health and Safety Training, 29 CFR 1910.120, 2015
- OSHA 8-Hour Refresher Safety Training, 29 CFR 1910.120 and CCR Title 8, Section 5192
- First Aid and CPR Certified
- ENV SP Certified

Appendix H

Noise Measurement Data

Freq Weight : A
 Time weight : SLOW
 Level Range : 40-100
 Max dB : 82.0 - 2023/03/23 16:11:01
 Level Range : 40-100
 SEL : 119.3
 Leq : 70.0

No. s	Date Time	(dB)					
1	2023/03/23 14:13:03	57.9	58.0	56.9	55.3	57.2	
6	2023/03/23 14:33:03	58.1	56.9	57.1	55.0	57.5	
11	2023/03/23 14:53:03	54.1	55.0	53.6	57.4	54.0	
16	2023/03/23 15:13:03	56.6	56.3	55.9	55.2	56.8	
21	2023/03/23 15:33:03	56.9	57.4	56.8	60.0	58.5	
26	2023/03/23 15:53:03	57.3	56.8	57.1	55.2	56.0	
31	2023/03/23 16:13:03	58.4	56.0	56.2	54.1	58.4	
36	2023/03/23 16:33:03	55.4	65.1	64.1	56.2	57.3	
41	2023/03/23 16:53:03	56.7	59.1	68.0	56.0	59.9	
46	2023/03/23 17:13:03	56.7	58.2	64.5	57.6	56.5	
51	2023/03/23 17:33:03	56.6	58.8	59.1	59.3	59.8	
56	2023/03/23 17:53:03	58.3	58.3	58.0	59.1	57.3	
61	2023/03/23 18:13:03	56.8	58.1	57.3	57.6	57.3	
66	2023/03/23 18:33:03	57.8	63.2	57.7	57.6	57.7	
71	2023/03/23 18:53:03	65.7	56.2	55.2	59.4	56.0	
76	2023/03/23 19:13:03	56.8	56.4	55.3	54.8	54.4	
81	2023/03/23 19:33:03	54.4	54.0	57.4	59.0	55.3	
86	2023/03/23 19:53:03	55.9	54.8	51.4	51.8	52.3	
91	2023/03/23 20:13:03	55.0	51.5	49.1	51.1	53.1	
96	2023/03/23 20:33:03	51.2	52.5	55.5	54.1	54.0	
101	2023/03/23 20:53:03	62.5	56.0	52.1	56.5	54.4	
106	2023/03/23 21:13:03	52.7	53.2	53.1	55.6	52.8	
111	2023/03/23 21:33:03	53.4	53.1	54.0	55.5	53.3	
116	2023/03/23 21:53:03	52.7	55.2	56.3	53.0	52.8	
121	2023/03/23 22:13:03	52.4	53.2	56.4	52.5	53.4	
126	2023/03/23 22:33:03	51.5	49.3	52.3	55.3	52.2	
131	2023/03/23 22:53:03	48.3	50.1	49.8	50.1	53.5	
136	2023/03/23 23:13:03	50.4	52.6	48.6	51.8	49.6	
141	2023/03/23 23:33:03	51.3	46.4	51.2	50.8	48.5	
146	2023/03/23 23:53:03	47.6	49.9	47.5	51.2	44.7	
151	2023/03/24 00:13:03	45.8	45.2	51.8	54.2	47.5	
156	2023/03/24 00:33:03	49.3	45.4	48.3	50.8	50.3	
161	2023/03/24 00:53:03	44.6	47.0	57.2	42.1	47.3	
166	2023/03/24 01:13:03	50.1	43.0	47.1	44.5	46.2	
171	2023/03/24 01:33:03	45.6	46.9	49.6	45.5	52.7	
176	2023/03/24 01:53:03	49.4	52.6	42.0	44.1	45.9	
181	2023/03/24 02:13:03	48.9	48.7	45.2	42.1	46.9	
186	2023/03/24 02:33:03	42.5	46.0	45.1	51.6	47.8	
191	2023/03/24 02:53:03	44.8	45.9	45.4	46.6	47.2	
196	2023/03/24 03:13:03	46.2	47.6	46.3	39.3	45.0	
201	2023/03/24 03:33:03	45.6	46.4	50.2	40.2	45.3	
206	2023/03/24 03:53:03	47.3	47.2	46.5	44.7	52.0	
211	2023/03/24 04:13:03	51.7	48.0	45.6	48.3	53.9	
216	2023/03/24 04:33:03	49.6	48.0	53.0	51.7	48.4	
221	2023/03/24 04:53:03	51.4	54.0	54.7	49.2	51.7	
226	2023/03/24 05:13:03	51.1	53.2	53.5	54.4	51.4	
231	2023/03/24 05:33:03	52.2	54.6	54.5	55.7	53.7	
236	2023/03/24 05:53:03	54.7	54.0	62.0	60.3	61.3	
241	2023/03/24 06:13:03	56.8	61.2	54.9	57.4	58.8	
246	2023/03/24 06:33:03	57.8	58.8	57.9	57.5	57.6	
251	2023/03/24 06:53:03	57.2	58.4	60.2	58.4	59.9	
256	2023/03/24 07:13:03	62.5	58.4	60.3	58.6	54.8	
261	2023/03/24 07:33:03	55.1	58.3	70.4	53.4	55.2	
266	2023/03/24 07:53:03	57.2	58.9	57.2	63.0	53.6	
271	2023/03/24 08:13:03	55.2	54.3	54.0	53.8	54.8	
276	2023/03/24 08:33:03	56.2	54.4	55.9	54.5	55.6	
281	2023/03/24 08:53:03	55.1	53.3	56.2	54.4	54.2	
286	2023/03/24 09:13:03	54.0	52.9	52.9	52.3	60.5	
291	2023/03/24 09:33:03	52.9	56.6	53.7	53.7	50.9	
296	2023/03/24 09:53:03	51.6	63.2	55.1	51.8	52.4	
301	2023/03/24 10:13:03	51.5	50.6	53.5	55.4	52.9	
306	2023/03/24 10:33:03	51.7	54.6	53.6	55.9	52.7	
311	2023/03/24 10:53:03	53.0	56.9	52.1	51.0	52.8	
316	2023/03/24 11:13:03	54.0	50.4	53.8	53.0	51.4	
321	2023/03/24 11:33:03	50.3	53.7	49.0	50.9	53.0	
326	2023/03/24 11:53:03	53.0	52.0	51.3	52.6	52.7	
331	2023/03/24 12:13:03	57.0	52.0	51.9	53.9	52.3	
336	2023/03/24 12:33:03	55.2	52.4	51.8	56.4	56.5	
341	2023/03/24 12:53:03	58.2	58.3	54.7	56.9	56.4	
346	2023/03/24 13:13:03	57.4	57.1	55.5	55.8	54.3	
351	2023/03/24 13:33:03	56.6	55.9	58.3	56.1	55.9	
356	2023/03/24 13:53:03	57.9	62.3	57.1	57.4	57.2	

Freq Weight : A
 Time Weight : SLOW
 Level Range : 40-100
 Max dB : 93.7 - 2023/03/23 13:04:35
 Level Range : 40-100
 SEL : 97.2
 Leq : 67.7

No. s	Date Time	(dB)				
1	2023/03/23 12:58:23	60.9	59.8	60.3	60.0	59.4
6	2023/03/23 12:58:38	58.2	59.1	60.6	59.2	58.3
11	2023/03/23 12:58:53	57.7	58.4	61.9	61.4	59.3
16	2023/03/23 12:59:08	59.1	58.7	57.8	59.3	57.3
21	2023/03/23 12:59:23	58.4	56.8	56.9	56.2	56.6
26	2023/03/23 12:59:38	57.1	56.3	56.7	55.7	55.4
31	2023/03/23 12:59:53	55.0	54.9	58.2	55.8	54.7
36	2023/03/23 13:00:08	54.0	56.2	56.1	55.6	54.9
41	2023/03/23 13:00:23	57.2	57.2	57.6	58.1	57.8
46	2023/03/23 13:00:38	58.0	57.6	57.6	58.4	58.3
51	2023/03/23 13:00:53	58.2	58.1	59.0	60.2	59.6
56	2023/03/23 13:01:08	58.4	58.2	57.3	56.8	58.5
61	2023/03/23 13:01:23	59.5	58.3	58.2	59.0	57.2
66	2023/03/23 13:01:38	57.9	58.6	57.0	56.8	56.4
71	2023/03/23 13:01:53	58.2	59.4	57.8	58.1	58.9
76	2023/03/23 13:02:08	58.4	58.0	58.5	65.3	59.7
81	2023/03/23 13:02:23	56.8	55.8	56.8	56.5	56.4
86	2023/03/23 13:02:38	56.2	55.6	56.2	56.6	55.7
91	2023/03/23 13:02:53	56.8	56.8	59.9	58.7	62.3
96	2023/03/23 13:03:08	60.4	59.7	58.7	59.8	59.0
101	2023/03/23 13:03:23	58.0	58.9	58.8	59.0	59.2
106	2023/03/23 13:03:38	59.4	57.6	57.2	57.6	57.6
111	2023/03/23 13:03:53	58.6	59.7	65.9	59.9	57.7
116	2023/03/23 13:04:08	57.8	57.8	59.0	59.2	59.1
121	2023/03/23 13:04:23	58.6	58.8	58.4	89.6	86.1
126	2023/03/23 13:04:38	74.5	64.9	59.9	59.4	61.5
131	2023/03/23 13:04:53	60.1	59.9	58.8	59.7	57.5
136	2023/03/23 13:05:08	58.5	59.1	59.2	58.8	59.1
141	2023/03/23 13:05:23	59.7	58.3	56.0	57.0	56.8
146	2023/03/23 13:05:38	57.1	58.0	57.7	57.2	56.6
151	2023/03/23 13:05:53	57.5	58.0	59.6	58.8	57.6
156	2023/03/23 13:06:08	56.6	57.6	58.4	59.0	60.2
161	2023/03/23 13:06:23	62.3	59.6	60.1	59.1	59.7
166	2023/03/23 13:06:38	58.9	58.7	58.5	59.6	59.9
171	2023/03/23 13:06:53	58.8	58.9	58.8	59.5	60.1
176	2023/03/23 13:07:08	60.2	59.7	60.2	60.5	60.6
181	2023/03/23 13:07:23	59.7	59.5	58.9	58.9	58.1
186	2023/03/23 13:07:38	59.2	59.6	59.9	59.8	58.9
191	2023/03/23 13:07:53	59.2	58.6	60.4	60.2	60.3
196	2023/03/23 13:08:08	64.9	62.8	61.4	59.8	59.6
201	2023/03/23 13:08:23	58.9	59.8	59.3	59.1	62.0
206	2023/03/23 13:08:38	62.3	59.5	59.2	59.4	63.0
211	2023/03/23 13:08:53	59.6	59.1	58.6	60.9	60.2
216	2023/03/23 13:09:08	61.3	60.0	60.5	60.4	61.2
221	2023/03/23 13:09:23	60.1	59.7	62.0	68.1	61.8
226	2023/03/23 13:09:38	59.6	58.3	58.6	59.0	58.8
231	2023/03/23 13:09:53	57.4	57.2	58.5	58.0	58.3
236	2023/03/23 13:10:08	59.0	59.0	59.0	58.4	58.4
241	2023/03/23 13:10:23	63.2	62.0	61.6	58.6	57.4
246	2023/03/23 13:10:38	57.6	58.4	58.3	57.6	57.4
251	2023/03/23 13:10:53	57.3	56.0	55.9	55.7	56.4
256	2023/03/23 13:11:08	57.0	57.1	56.9	56.2	56.8
261	2023/03/23 13:11:23	58.2	58.6	58.3	58.3	58.3
266	2023/03/23 13:11:38	57.4	58.0	58.1	58.4	59.2
271	2023/03/23 13:11:53	60.0	59.4	59.3	58.9	58.6
276	2023/03/23 13:12:08	59.8	64.6	60.5	60.3	59.9
281	2023/03/23 13:12:23	58.4	58.8	58.0	58.0	57.7
286	2023/03/23 13:12:38	57.6	59.2	58.8	59.0	59.0
291	2023/03/23 13:12:53	59.2	59.7	60.0	59.3	64.8
296	2023/03/23 13:13:08	61.0	59.7	60.2	58.7	58.7

Freq Weight : A
 Time Weight : SLOW
 Level Range : 40-100
 Max dB : 69.7 - 2023/03/23 13:22:39
 Level Range : 40-100
 SEL : 82.9
 Leq : 53.4

No. s	Date Time	(dB)					
1	2023/03/23 13:20:44	51.8	51.9	51.9	52.1	51.4	
6	2023/03/23 13:20:59	51.6	53.7	52.2	52.7	52.3	
11	2023/03/23 13:21:14	51.8	52.1	51.7	51.0	52.2	
16	2023/03/23 13:21:29	52.2	53.4	53.6	55.1	54.1	
21	2023/03/23 13:21:44	54.9	53.6	53.0	52.3	52.4	
26	2023/03/23 13:21:59	53.4	56.3	66.5	59.5	55.4	
31	2023/03/23 13:22:14	54.4	53.1	53.4	54.2	53.7	
36	2023/03/23 13:22:29	53.9	57.4	57.9	66.3	57.5	
41	2023/03/23 13:22:44	53.8	52.6	52.1	52.1	51.6	
46	2023/03/23 13:22:59	52.3	52.6	52.6	52.8	52.0	
51	2023/03/23 13:23:14	52.4	52.1	51.9	52.2	52.2	
56	2023/03/23 13:23:29	53.1	53.3	53.0	53.8	53.3	
61	2023/03/23 13:23:44	54.2	54.0	53.7	53.5	53.3	
66	2023/03/23 13:23:59	53.2	52.8	54.3	55.2	54.5	
71	2023/03/23 13:24:14	54.7	55.0	52.6	52.7	52.2	
76	2023/03/23 13:24:29	52.5	53.8	52.9	52.2	52.2	
81	2023/03/23 13:24:44	51.1	51.0	52.9	54.6	51.2	
86	2023/03/23 13:24:59	51.5	51.6	51.8	51.9	52.4	
91	2023/03/23 13:25:14	53.8	54.4	52.8	51.9	52.0	
96	2023/03/23 13:25:29	53.6	54.2	55.9	52.6	52.4	
101	2023/03/23 13:25:44	53.5	52.5	55.1	52.4	51.8	
106	2023/03/23 13:25:59	53.9	52.7	53.3	53.3	52.5	
111	2023/03/23 13:26:14	51.5	52.1	51.4	50.5	51.9	
116	2023/03/23 13:26:29	50.8	51.3	50.9	50.2	50.2	
121	2023/03/23 13:26:44	50.6	50.1	50.8	50.8	51.0	
126	2023/03/23 13:26:59	51.2	52.5	52.8	52.5	50.8	
131	2023/03/23 13:27:14	51.1	50.9	51.1	51.0	52.3	
136	2023/03/23 13:27:29	51.9	52.6	52.6	52.0	51.2	
141	2023/03/23 13:27:44	51.2	50.9	51.9	52.5	51.9	
146	2023/03/23 13:27:59	51.7	54.8	53.5	52.8	52.8	
151	2023/03/23 13:28:14	53.3	52.7	51.9	51.7	51.7	
156	2023/03/23 13:28:29	51.8	51.9	53.4	53.4	54.0	
161	2023/03/23 13:28:44	56.0	52.9	53.6	53.2	52.8	
166	2023/03/23 13:28:59	52.4	52.9	52.8	52.8	53.5	
171	2023/03/23 13:29:14	52.8	52.4	51.5	53.8	53.7	
176	2023/03/23 13:29:29	52.6	51.5	51.9	51.3	51.5	
181	2023/03/23 13:29:44	51.8	51.7	52.2	52.8	51.9	
186	2023/03/23 13:29:59	49.9	50.2	50.7	51.5	53.7	
191	2023/03/23 13:30:14	53.4	51.9	51.9	51.9	52.6	
196	2023/03/23 13:30:29	52.1	52.4	51.3	52.1	53.8	
201	2023/03/23 13:30:44	55.6	53.3	52.6	52.3	51.2	
206	2023/03/23 13:30:59	51.7	53.8	53.3	52.6	53.5	
211	2023/03/23 13:31:14	51.1	51.3	51.5	51.2	53.1	
216	2023/03/23 13:31:29	51.0	50.6	51.5	52.2	53.1	
221	2023/03/23 13:31:44	53.6	53.5	55.3	53.2	52.5	
226	2023/03/23 13:31:59	54.2	53.2	53.8	52.9	53.3	
231	2023/03/23 13:32:14	53.5	53.6	52.0	51.4	52.5	
236	2023/03/23 13:32:29	52.8	52.1	52.0	52.2	52.7	
241	2023/03/23 13:32:44	51.8	51.4	53.8	51.8	51.9	
246	2023/03/23 13:32:59	52.4	53.5	53.3	51.9	53.2	
251	2023/03/23 13:33:14	52.7	53.2	52.9	52.6	51.8	
256	2023/03/23 13:33:29	54.0	53.2	52.5	51.4	52.2	
261	2023/03/23 13:33:44	52.2	52.0	52.4	51.8	51.3	
266	2023/03/23 13:33:59	51.3	51.0	51.8	52.5	52.2	
271	2023/03/23 13:34:14	52.1	52.8	52.7	54.0	52.2	
276	2023/03/23 13:34:29	52.9	53.5	54.1	52.1	51.9	
281	2023/03/23 13:34:44	52.7	52.3	52.7	53.2	52.9	
286	2023/03/23 13:34:59	52.4	52.4	52.4	51.9	52.0	
291	2023/03/23 13:35:14	50.8	50.5	51.3	52.5	52.4	
296	2023/03/23 13:35:29	53.4	53.5	53.4	52.6	53.1	

Freq Weight : A
 Time weight : SLOW
 Level Range : 40-100
 Max dB : 80.5 - 2023/03/23 13:47:11
 Level Range : 40-100
 SEL : 92.5
 Leq : 63.0

No.s	Date Time	(dB)				
1	2023/03/23 13:41:23	58.2	58.1	59.4	67.3	60.5
6	2023/03/23 13:41:38	59.5	59.9	59.5	59.5	59.8
11	2023/03/23 13:41:53	60.0	60.5	64.0	61.5	60.6
16	2023/03/23 13:42:08	59.5	60.0	60.2	59.2	60.4
21	2023/03/23 13:42:23	60.1	59.9	59.5	60.9	60.7
26	2023/03/23 13:42:38	60.3	60.6	58.6	57.7	59.2
31	2023/03/23 13:42:53	60.4	60.5	61.1	61.7	61.4
36	2023/03/23 13:43:08	62.0	60.6	61.6	59.8	60.3
41	2023/03/23 13:43:23	60.6	59.8	60.7	60.0	60.2
46	2023/03/23 13:43:38	59.6	59.5	60.1	59.3	60.2
51	2023/03/23 13:43:53	59.3	59.5	61.9	66.5	65.0
56	2023/03/23 13:44:08	60.3	59.3	65.2	62.6	63.6
61	2023/03/23 13:44:23	62.0	60.5	60.5	62.2	62.4
66	2023/03/23 13:44:38	61.6	61.1	60.8	61.0	63.1
71	2023/03/23 13:44:53	64.2	62.2	61.7	61.6	61.0
76	2023/03/23 13:45:08	60.6	61.2	60.1	60.6	60.3
81	2023/03/23 13:45:23	59.6	59.6	61.2	60.6	59.2
86	2023/03/23 13:45:38	59.4	58.9	59.3	59.0	70.3
91	2023/03/23 13:45:53	63.5	59.5	59.7	65.1	61.1
96	2023/03/23 13:46:08	58.7	62.6	60.1	58.6	58.9
101	2023/03/23 13:46:23	59.3	60.4	64.3	66.9	64.8
106	2023/03/23 13:46:38	61.0	60.0	60.9	61.0	62.0
111	2023/03/23 13:46:53	61.5	61.5	62.5	62.9	65.5
116	2023/03/23 13:47:08	79.7	75.1	65.3	62.4	63.3
121	2023/03/23 13:47:23	62.1	61.0	60.9	61.6	61.5
126	2023/03/23 13:47:38	60.5	60.8	60.0	61.9	72.2
131	2023/03/23 13:47:53	67.6	62.2	61.2	62.9	59.0
136	2023/03/23 13:48:08	57.2	57.5	57.6	59.2	58.7
141	2023/03/23 13:48:23	58.5	59.8	59.0	60.0	59.5
146	2023/03/23 13:48:38	58.7	58.8	58.4	60.3	73.2
151	2023/03/23 13:48:53	65.8	59.7	57.8	59.8	60.2
156	2023/03/23 13:49:08	60.8	70.7	62.1	59.3	60.6
161	2023/03/23 13:49:23	62.3	62.4	60.0	59.1	59.3
166	2023/03/23 13:49:38	59.3	59.8	58.5	58.9	59.3
171	2023/03/23 13:49:53	59.8	60.5	61.2	60.7	59.5
176	2023/03/23 13:50:08	58.8	60.2	59.9	59.7	60.1
181	2023/03/23 13:50:23	60.5	62.4	63.0	60.8	59.1
186	2023/03/23 13:50:38	61.2	59.7	59.5	61.7	64.3
191	2023/03/23 13:50:53	60.1	59.1	59.7	59.3	59.3
196	2023/03/23 13:51:08	58.6	58.1	58.7	59.1	60.3
201	2023/03/23 13:51:23	59.7	59.8	59.8	58.9	58.8
206	2023/03/23 13:51:38	59.3	58.8	59.0	59.4	59.4
211	2023/03/23 13:51:53	59.6	62.9	70.7	63.9	63.4
216	2023/03/23 13:52:08	67.1	60.6	61.2	68.9	65.1
221	2023/03/23 13:52:23	59.3	58.2	58.8	58.7	59.6
226	2023/03/23 13:52:38	63.7	63.1	61.6	61.9	60.6
231	2023/03/23 13:52:53	60.4	65.0	62.8	60.6	60.7
236	2023/03/23 13:53:08	60.1	59.4	59.0	58.7	59.0
241	2023/03/23 13:53:23	64.3	62.0	62.6	64.9	68.0
246	2023/03/23 13:53:38	61.8	60.0	59.9	59.3	59.4
251	2023/03/23 13:53:53	61.1	63.2	64.0	62.0	68.9
256	2023/03/23 13:54:08	62.1	59.4	60.0	60.7	62.7
261	2023/03/23 13:54:23	63.8	59.7	58.2	58.3	56.9
266	2023/03/23 13:54:38	57.9	57.7	61.7	61.6	65.1
271	2023/03/23 13:54:53	66.2	60.0	58.8	59.1	58.9
276	2023/03/23 13:55:08	59.8	69.1	61.8	59.7	60.2
281	2023/03/23 13:55:23	58.9	58.9	58.9	59.5	58.4
286	2023/03/23 13:55:38	59.5	59.6	59.3	60.4	60.5
291	2023/03/23 13:55:53	61.4	69.7	64.6	60.3	59.6
296	2023/03/23 13:56:08	60.3	61.5	64.7	63.7	61.6

Appendix I

Roadway Construction Noise Modeling Results

Roadway Construction Noise Model (RCNM), Version 1.1

Report date: 06/20/2023
 Case Description: Grading

**** Receptor #1 ****

Description	Land Use	Daytime	Baselines (dBA)	
			Evening	Night
Grading	Residential	65.0	55.0	50.0

Description	Impact Device	Usage (%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Excavator	No	40		80.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limit Exceedance (dBA)										Noise Limits (dBA)		
Night	Equipment	Day	Calculated (dBA)		Day		Evening		Lmax	Lmax	Lmax	
			Lmax	Leq	Day	Night	Lmax	Leq				
	Leq	Lmax	Leq	Lmax	Leq	Leq	Lmax	Leq	Lmax	Leq	Lmax	
	Excavator	N/A	N/A	80.7	76.7	N/A	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Grader	N/A	N/A	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Dozer	N/A	N/A	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Backhoe	N/A	N/A	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Backhoe	N/A	N/A	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	

