1 INTRODUCTION

This Biological Assessment (BA) has been prepared on behalf of Hercules LLC (Prologis) for the proposed removal of an abandoned waste water pipeline offshore of the city of Hercules (Project). The Project and its potential effects to threatened and endangered species are described and evaluated in this BA. The species of concern are under the purview of the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) under Section 7 of the Federal Endangered Species Act (FESA), and for Essential Fish Habitat (EFH) under the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). This BA also addresses the potential for "take" of state listed species under the California Endangered Species Act (CESA) (Cal Fish and Game Code sec. 2080 *et. seq.)*.

The BA concludes that the removal activities are not likely to adversely affect individuals of the southern distinct population segment (DPS) green sturgeon, Sacramento River winter-run Chinook, Central Valley spring-run Chinook, Central valley steelhead, or Central California Coast steelhead evolutionarily significant units (ESUs), Longfin smelt, and Delta smelt. In addition, proposed pipeline removal activities are not expected to degrade EFH in the San Francisco Bay.

This analysis also concludes that, due to the temporary nature of the Project, the Project will not cause a "take" (as defined under CESA) of any state listed species.

1.1 Project Description

Prologis proposes to remove an 8 inch steel wastewater outfall pipeline located in Hercules (Figure 1-1). The pipeline extends approximately 2,000 ft into the San Pablo Bay (Bay). The wastewater outfall pipeline is buried approximately 1,200 feet from the shoreline in varying depths of sediment, and the remainder of the pipeline rests on the sediment surface.

The pipeline was originally associated with Sequoia Refining (Sequoia), a subsidiary of Gulf Oil. The pipeline was originally built in 1966 for the Sequoia Petroleum Refinery (Refinery), and operated for 31 years until ceasing operations in 1997. The Refinery was built on a 200 acre parcel of vacant industrial land adjacent to San Pablo Bay in Hercules, CA. Because of draft limitations (shallow mudline elevations) near shore, oil deliveries were received through a free-standing marine oil terminal (MOT), about ¾ mile out in the Bay. The oil was then transported to shore through pipelines buried under the Bay. Sequoia also installed the 8 inch wastewater outfall pipeline which shares a portion of the oil pipeline trench. The wastewater outfall pipeline is buried in varying depths of sediment for

Figure 1-1 Vicinity Map and Project Location

approximately 1,200 feet from the shoreline and the remainder of the pipeline rests on the sediment surface. The MOT and pipelines are situated on land leased from the California State Lands Commission (SLC).

Sequoia sold the refinery in 1976 to Pacific Refining (PRC), a subsidiary of Coastal Corporation (Coastal). (PRC is now known as Coscol Petroleum, a subsidiary of El Paso Natural Gas now owned by Kinder Morgan Inc.) In the mid-1990s, Coastal decided to sell the Refinery, and Catellus, through a joint venture known as Hercules LLC (HLLC). HLLC purchased the site in 1997 for redevelopment as a residential project. In a series of transactions over the years, Catellus became the sole partner in HLLC, an interest subsequently acquired by Prologis.

PRC retained ownership of and responsibility for the MOT, its pipelines, and the associated SLC lease. During the summer of 2010, PRC contractors demolished the MOT and abandoned its associated petroleum lines. SLC agreed that the petroleum pipelines could be cut below the mudline, grouted in, and abandoned in place. The PRC project complied with the California Environmental Quality Act (CEQA) through a Mitigated Negative Declaration (MND) with SLC as the lead agency (SCH #2009032085 File Ref: W30068-13; PRC 3414.1 CSLC MND #750).

The land-based portion of the Refinery was decommissioned, dismantled, remediated, and redeveloped for housing, commercial use, and open space. The site remediation plan included groundwater extraction and treatment for which the Refinery wastewater outfall pipeline was essential, so PRC's SLC lease was bifurcated, and the portion on which the wastewater pipeline is located was assigned to HLLC/Prologis. HLLC site remediation was completed in 2001, and the wastewater pipeline has been out of service since that time. The overall redevelopment project was substantially completed in 2006.

The HLLC/Prologis Lease No. PRC 7985.1 expires on August 31, 2017. At the termination of lease, the Lessee is obligated to remove all improvements (pipeline) and return the premises to conditions existing prior to construction. In order to meet the obligations of the lease, Prologis will be removing the pipeline.

1.2 Construction Methods

In-water construction activities and best management practices are based on design information provided by the Project Sponsor, and typical construction practices in San Francisco Bay. All in-water construction will be conducted in compliance with regulatory permits, including scheduling of work during appropriate seasons to minimize or avoid effects on sensitive biological resources. The following sections detail the proposed methods for removing the pipeline. Additional details, with any deviations to prescribed methods detailed in this application, will be provided to the regulatory agencies after the

construction bid is awarded and prior to initiation of construction. Detailed work plans will be provided for review and approval prior to any construction.

1.2.1 Shore-side portion of the pipeline removal

The shore-side work will be conducted first. The onshore work to abandon the pipeline in place would occur where the rip rap is located on the embankment portion of the Union Pacific Railroad Right of Way (UPRR ROW) where the rip rap would be temporarily relocated to expose the pipeline. Disturbance is not anticipated to the surface of Victoria By The Bay Park, the existing or planned Bay Trail sections, or the Union Pacific Railroad train tracks and immediate right-of-way. The work in the Bay would remove the pipeline buried beneath the Bay muds and transport it to a permitted and appropriate recycling or disposal facility.

The 160-foot-long section of the pipeline is located on land. When the remediation on the refinery site was completed, the pipeline was cut and capped with a steel flange which was welded in place, and the location was backfilled. From the point at which the line is capped underground inside the park, it continues toward the Bay and crosses through a steel sleeve beneath the Union Pacific Railroad tracks, and extends beneath shoreline rip rap and under the mudline at which point it extends approximately 2,000 feet bayward ending at the diffusers.

The 160-foot-long shore-side portion of the project pipeline would be abandoned in place. Work would occur from the water over an approximately 5-day period, using a 4-step process, as follows: (1) a small area of rip rap (10 feet length x 10 feet width x 5 feet deep) between the railroad tracks and the Bay would be removed to expose the pipeline, (2) the exposed section of pipeline on the west side of the railroad tracks would be cut at or near the mudline and where the pipeline turns east horizontally near the top of the embankment to cross beneath the railroad tracks, and the cut section removed, (3) the wastewater pipeline and the casing below the railroad tracks extending to the line's end in the Victoria By The Bay Park would be grouted and left in place, and (4) the rip rap would be replaced along the shoreline. Best management practices (BMPs) would be employed to prevent sediment, grout or other construction materials from entering the Bay as a result of activities associated with abandoning the pipeline segment in place.

The shore-side work would be done from the water. A tug boat would position a crane barge (a shallow draft barge with a crane) close to the shore during high tide, and the barge would remain in place for the duration of the shore-side work. The barge would be mobilized to the work location from the contractor’s shore-based marine facility. A crew boat would ferry key personnel to and from the barge. The barge would be located close to the shore, and personnel would also access the land via a gangway from the barge. The barge would have a five to seven person crew and the

tugboat would have a two person crew. When feasible, the barge would use spuds to secure its position. The spuds will minimize anchoring and disturbance to the surrounding sediments. To remove shoreline riprap and expose the final segment of pipeline, the shallow draft barge would remain in place to conduct construction activities. During low tides the barge may rest on the sediment surface until the rising tide. In addition to using a crew boat, personnel would be transported to the barge by means of a gangway from the shore which would further reduce disturbance to bottom sediments. The gangway would be hauled onto the barge every night for security purposes (i.e., to prevent unauthorized access). A tug boat, working skiff, or a crew boat would bring in materials and personnel to the barge as needed. Trips would be minimized and vessel speeds in this area would be limited to no-wake to minimize the disturbance to fish in the immediate vicinity.

The shore-side work would occur in 10 hour shifts from approximately 7:00AM-5:00PM during the weekdays to comply with the City noise ordinance unless extended work hours are approved by the City. There would be no work at night or any lights or noise from the barge once the work has shut down each day, other than safety-related lighting required to comply with United States Coast Guard regulations.

Rip Rap Removal

The crane on the crane barge would be used to access the rip rap area on the Bay (west) side of the railroad tracks. The crane would use a clam shell bucket to temporarily remove the rip rap, stockpile it atop other rip rap, and, after completion of the grouting, replace the rip rap. The volume of rock to be relocated would be approximately 20 cubic yards (10 feet length x 10 feet width x 5 feet deep). Authorization would be obtained from UPRR before the start of work.

Wastewater Pipeline Cut and Removal

Once the wastewater pipeline is exposed by removal of the rip rap on top of it, it will be cut at or near the mudline and near the top of the embankment. The pipe would be cut using an oxy-acetylene torch. The pipe would be cut by an approximately 3-4 person crew as needed to safely complete the work. The estimated duration of the work is one day. This work would occur within the UPRR ROW.

The cut section(s) would be lifted out and placed on the barge for transport to the Contractor's shore based facility where it would be loaded onto a truck for transport to a recycling and/or disposal facility.

Wastewater Pipeline Left in Place

The remaining pipeline between the top of the embankment and the end of the pipe beneath the park would be grouted, capped, and left in place. Both the wastewater pipeline and the casing surrounding the pipeline will be grouted. The grouting operation would be based on the barge. Support activities would also be primarily located on the barge. The pipeline would be grouted by inserting a tremie pipe horizontally into the line at its western terminus. Grout would then be pumped into the wastewater pipeline, working from the capped eastern terminus back to the western end of the pipeline. After completion, the western end of the pipeline would be capped. The only land-based activities that would be required to conduct this work would consist of having several workers present to insert the tremie pipe into the remnant wastewater pipe. Grouting of the pipeline is expected to take less than one day.

A Grout Management Plan and BMPs would be employed so that no grout or other materials are discharged into the Bay. All grouting equipment would be staged on the deck of the barge inside spill guards. Watertight portable tanks would be used to contain and transport washout water. Tremie methods would be used to place all grout so that placement can be monitored and controlled. Grout hoses and fittings would be in new or like-new condition, and would be visually inspected prior to use. Grout mix would be pre-mixed in super sacks and stored on the barge. Any spills of dry mix would be cleaned up with shovel and broom (i.e., no water would be used). Secondary containment would be used under Tremie hose connections. Any debris or excess grouting material would be removed from the site and recycled or disposed of at an appropriate facility.

Rip Rap Replacement

Upon completion of the onshore pipeline removal and grouting, the stockpiled rip rap rock would be placed back into position with the clamshell bucket. It is anticipated that the clean stockpiled rip rap would be sufficient to cover the area, and no import of new rip rap is proposed. The rip rap would be placed to cover the cut and capped end of the wastewater pipeline and result in a shoreline similar to existing conditions.

1.2.2 Pipeline Removal in the Bay

A barge (a derrick barge) and a tug boat would be used to remove the wastewater pipeline, diffuser, and the three steel plates that have been used to secure the pipeline near the diffuser. The barge would have a five to seven person crew plus 3 divers when necessary and the tugboat would have a two person crew. The barge would be equipped with two spuds and four anchors which would be controlled by deck-mounted winches. The spuds and anchors would be deployed to minimize the

disturbance of sediment (e.g. not dragging anchors along the seafloor). Only spuds would be used, unless currents and/or wind require the use of anchors; depending on the need to move or hold position, both spuds and anchor(s) could be utilized simultaneously. The anchors would be deployed and recovered with the use of a tugboat. All these operations are typical of marine industry standards in the San Francisco Bay area.

Pipeline removal would begin at the western end (diffusers) of the pipeline, approximately 2,000 feet offshore. Divers would attach straps and lines to the end of the pipeline, and a barge-mounted winch would lift the pipeline to the surface. The lifting operation would be conducted at a slow rate so that the small amount of sediment over the submerged portions of the pipeline would resettle with minimal disruption. No dredging or water-jetting of the Bay floor is planned in connection with the removal process. In shallower depths the barge would sit on the bottom during low tides. The footprint of the area potentially affected by the removal of the pipeline is the extent of the pipeline and approximately 10 feet on either side of the pipeline (approximately 40,000 square feet/0.92 acres).

The pipeline would be slowly winched in to lift the pipeline up through the sediment and water onto the barge. Because the pipeline is approximately 8 inches in diameter and the surrounding sediment is soft and loose (not significantly consolidated), the pipeline would be expected to move readily through the sediment to the surface. As the pipeline moves through the mud, the sediment would fall in on the void below. Sediment would only be resuspended at the point where the pipeline is pulled above the top of the sediment into the water. It is anticipated that only the top foot of the sediment would be disturbed as the pipeline is lifted and turbidity would be minimal at the point of extraction.

The turbidity would occur temporarily as each section of the pipeline is raised. Approximately 150-200 feet of pipeline would be removed each day. The work would occur in 10 hour shifts from approximately 7:00AM-5:00PM during the weekdays. Pipeline removal in the Bay is expected to require approximately 2 to 3 weeks. Work during the daylight hours without the use of lights will minimize the disturbance to fish and other animals in the project work area. There would be no work at night or any lights or noise from the vessel once the work has shut down each day, other than navigational safety lighting required by United States Coast Guard regulations.

The wastewater pipeline would be pulled onto the barge where divers and barge personnel would secure the pipe to be cut. The recovered pipe length for each segment that is pulled up would be determined by the final contracted barge capacity but is anticipated to be no more than approximately 50 feet in length. Once the pipeline has been extracted and placed on the barge, the

divers and platform personnel would secure the pipeline so that it can be cut. The pipeline would be cut with oxy-acetylene torches or mechanical shears. The cut portions of the pipeline would be stored on the barge. The procedure would continue shoreward with lifting pipeline, attaching it to the barge and cutting sections. The Project would minimize sediment disturbance and total suspended solids by keeping all equipment out of the water, and slowly lifting the pipeline from the sediment and through the water column. Due to the shallow water depth near shore, the last portion of the pipeline may be pulled from the shore toward the barge.

Once sufficient sections of pipeline are lifted and cut, the barge would transport the sections to the contractor's shore-based marine facility (the contractor's permanent base of operations). The barge would have the capacity to accumulate and then transport 20 50-foot sections. The entire project would therefore require two barge trips to haul the cut sections to the contractor's shore-based facility. The pipeline sections and any debris would be offloaded from the barge, the coatings would be removed as necessary, and the pipe sections would be loaded onto trucks for recycling and/or proper disposal. Any pre-recycling or pre-disposal testing of the pipeline required by the recycling/disposal facility would occur once the pipeline is on the barge or onshore at the contractor's shore-based facility. The pipeline would be recycled and/or disposed of, as appropriate, based on the type and condition of the pipe and coating.

A crew boat would ferry personnel to and from the barge. A tug boat would bring in a secondary barge and materials as needed. Trips would be minimized and vessel speeds in this area would be limited to no-wake in order to minimize disturbance to fish in the immediate vicinity.

1.3 Project Construction Schedule and Equipment to be Used

The entire project is expected to be completed over an approximately three-week period. Project-related activities would be performed between the hours of 7:00 am to 5:00 pm on weekdays, unless extended work hours are approved by the City.

Prior to commencement of the proposed Project. All construction in the water would be conducted in compliance with regulatory permits, including scheduling of work during appropriate seasons/construction windows to minimize or avoid effects on sensitive biological resources. Work would be conducted within the environmental windows between June 1 and October 31 to avoid impacts to listed species. All staging, fueling, and maintenance would be conducted on the barge in compliance with US Coast Guard (USCG) regulations.

Equipment that would be required to implement the project would consist of the following:

- A derrick barge **only** during the offshore pipeline work equipped with two spuds and four anchors (spuds and anchors are controlled by deck-mounted winches) and electrical generator;
- A crane barge **only** during the onshore pipeline work equipped with a crane and clamshell bucket, grout plant, grout pump and grout materials, mechanical pipe plugs, spuds, anchors (spuds and anchors are controlled by deck-mounted winches), and electrical generator;
- A tug to maneuver the barges;
- A work skiff for general support;
- A crew boat to shuttle the crew and material to and from the barge;
- Diver support equipment; and
- Air compressor, and welding equipment and tools.

Vessels and equipment that rely on internal combustion engines for power and/or propulsion would be kept in good working condition, and compliant with California emission regulations. Regular equipment maintenance and installation of mufflers, as appropriate on construction equipment, would be required of the contractor(s) to minimize noise levels on shore.