2.0 PROJECT DESCRIPTION

2.1 NEED FOR PROJECT

The proposed Hercules LLC/Prologis Hercules Pipeline Removal Project (Project) is needed to remove approximately 2,020 feet of non-operational 8-inch-diameter wastewater pipeline (located offshore and onshore), and grout the remaining 140 feet of this pipeline located on adjacent uplands under the jurisdiction of the city of Hercules (City). The 2,020 feet of the pipeline is currently under California State Lands Commission (CSLC) Lease No. PRC 7985.1, which is set to expire on August 31, 2017. Renewal of the lease is not appropriate because the pipeline is no longer in use, and will not be used in the future. Pursuant to the lease conditions, at the termination of the lease, Hercules LLC/Prologis (Applicant) is obligated to remove all improvements and return the premises to conditions existing prior to construction. Therefore, the proposed Project is required as part of the Applicant’s lease termination with the CSLC.

2.2 PROJECT LOCATION

As described in Section 1, the Project is located within the city of Hercules, Contra Costa County, extending from the shore of San Pablo Bay (Bay) approximately 2,000 feet into the Bay (see Figure 1-1). The shoreside (east) terminus of the non-operational wastewater pipeline is located approximately 160 feet east of the shoreline passing underneath riprap, Union Pacific Railroad Right-of-Way (UPRR ROW), Shoreline Park (Park), and a future alignment of the San Francisco Bay Trail (Bay Trail) at a depth of approximately 8 feet below the ground surface (see Figure 2-1 and Figure 1-3).

2.3 SETTING

2.3.1 Offshore

The offshore portion of the Project includes a 2,000-foot-long, 8-inch wastewater pipeline (Figure 1-2) within the State’s tidelands and submerged lands jurisdiction. The pipeline terminates offshore in three diffusers that rise about 2 feet above the Bay floor. The pipeline and three diffusers are held in place with three steel plates. As seen in Figure 1-2, the approximately 800 feet of pipeline furthest from the shore rest on the surface of the Bay floor (Etrac 2013). The remaining approximately 1,200 feet of pipeline located offshore is shallowly buried beneath the bottom of the Bay floor as seen in Figure 1-2. Results from preliminary investigations indicate the wastewater pipeline is covered on average by approximately 2 feet of sediment (Pacific EcoRisk 2013).

Existing land uses near the proposed offshore activities include:
• **Recreation.** The Bay is used for recreational purposes such as boating, sailing, and kayaking. The Bay is also used for fishing, especially for sturgeon and striped bass. Informal fishing access to the Bay occurs at the Project site.

• **Outfalls.** Three outfalls are located within the Project vicinity. Two of these storm water outfalls belong to the City and are located southwest of the Project site. The third outfall is a Rodeo Sanitary District treated sewage outfall located northwest of the Project site that extends approximately 4,700 feet into the Bay.

• **Shipping Channels.** A major navigable shipping channel that is extensively used for commercial and military shipping is located in the Bay. Deep water ship traffic bound for both the Port of Sacramento and the Port of Stockton traverses Carquinez Strait. The closest portion of the shipping channel is located approximately 5,500 feet from the western end of the subject pipeline proposed to be removed (ESA 2009).

• **Dredged Material Disposal Sites.** Three dredged material disposal sites in San Francisco Bay are located in the Carquinez Strait, Bay, and off of Alcatraz Island. Of these, the Carquinez Strait disposal site (SF-9) and the Bay disposal site (SF-10) are located near the Project area. Approximately 2 to 3 million cubic yards (mcy) of dredged material are disposed of annually at SF-9 and approximately 0.5 mcy of dredged material are disposed of annually at SF-10 (ESA 2009).

### 2.3.2 Onshore

Approximately 20 feet of the subject pipeline is located under riprap where the offshore portion of the pipeline meets the upland. This portion, which will be removed, is part of the CSLC lease area. Within the last 700 feet before the shoreline, the wastewater pipeline shares a 25-foot-wide common trench with the pipelines abandoned under the 2010 Coscol Petroleum/El Paso Corporation Marine Terminal Deconstruction and Pipeline Abandonment Project (Coscol Project). The eastern end of the wastewater pipeline, which is located onshore, has been capped with a welded-in-place blind flange (Figure 2-1). The onshore portion of the pipeline is at an estimated depth of approximately 8 feet below the ground surface at its eastern terminus (ESA 2009). The land slopes down toward the shore, and existing information suggests that the pipeline is under several feet of cover/riprap west of the railroad tracks.

This pipeline passes under the riprap, UPRR ROW, and Shoreline Park, crossing underneath the proposed Bay Trail alignment within the Park as seen in Figure 2-1. The onshore portion of the pipeline, though in the City’s jurisdiction (Figure 2-1), is part of the “whole of the action,” as described in CEQA, and the CSLC must therefore describe this part of the Project, and must disclose and analyze potential effects. The onshore portion of the Project, as seen in Figure 2-1, is included in the New Pacific Properties Specific Plan (City of Hercules 2000).
Figure 2-1. Zoom-In of Shore Side Area
To the west of the proposed Project is the Bay. To the east and south are the Victoria by the Bay Subdivision (Subdivision) and Shoreline Park (Park). To the north are private residences in the town of Rodeo and the Bay Trail (Figure 2-1). Existing land uses near the proposed onshore activities include:

- **San Francisco Bay Trail.** The Bay Trail is a planned recreational trail that, when complete, will circle San Francisco and San Pablo Bays with 500 miles of hiking and bicycle trails. Presently, approximately 330 miles of the Bay Trail are complete (Association of Bay Area Governments [ABAG] 2013). The existing Bay Trail near the Project area is operated and maintained by the East Bay Regional Park District. The proposed Bay Trail alignment located to the north and in the immediate vicinity of the wastewater pipeline consists of an unimproved trail along the Bay shore to the northern portion of Park. The wastewater pipeline extends landward perpendicular to the unimproved trail. Slightly south of the pipeline, the Bay Trail is an improved walkway south along the shoreline of the Bay.

- **Union Pacific Railroad.** The UPRR owns the parcel within the ROW that contains two sets of tracks that are located along the shoreline. A portion of the Project’s onshore buried wastewater pipeline is within the UPRR ROW. All of the onshore Project construction activities would be within the ROW and CSLC onshore upland areas. Approximately 50 trains pass along the tracks per day (Lopeman pers. comm. 2013). The railroad tracks are located between the Bay and Park.

- **Victoria by the Bay Residential Subdivision.** Located immediately adjacent to the Project area is this 206-acre Subdivision, which was constructed in 2006, has 748 single-family homes, 132 multi-family units, more than 30 acres of parks and designated open space, a commercial center, and an elementary school.

### 2.4 PROJECT OVERVIEW

The Applicant proposes to remove and cap and abandon-in-place segments of a non-operational 8-inch-diameter wastewater pipeline. The 2,160-foot-long Project pipeline is located on lands under the jurisdiction of the CSLC and City as shown below.

<table>
<thead>
<tr>
<th>Pipeline section length (ft)</th>
<th>Location</th>
<th>Proposed activity</th>
<th>Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,000</td>
<td>Offshore</td>
<td>Remove pipeline section and associated offshore diffusers</td>
<td>CSLC (Lease No. PRC 7985.1)</td>
</tr>
<tr>
<td>20</td>
<td>Onshore on shoreline</td>
<td>Remove pipeline section</td>
<td>City of Hercules (within Assessor’s Parcel Numbers 404-030-021 and 404-030-045)</td>
</tr>
<tr>
<td>140</td>
<td>Onshore</td>
<td>Cap and abandon pipeline section in place</td>
<td></td>
</tr>
</tbody>
</table>
The Applicant is seeking authorization from the CSLC to amend Lease No. PRC 7985.1 to allow removal of the pipeline and to terminate the lease upon successful Project completion. The wastewater pipeline is approximately 2,160 feet long with approximately 2,000 feet extending into the Bay, and about 160 feet extending onto land (Figure 1-2 and Figure 1-3). The Project would require about 3 weeks of construction of which approximately 1 week would be for onshore construction and approximately 2 weeks would be for offshore construction. The Project work is described in detail in the next sections.

**Onshore Work.** The onshore work would consist of removing approximately 20 feet of onshore pipeline (under riprap) under CSLC jurisdiction, and grout and abandon in-pace the remaining approximately 140 feet of wastewater pipeline under the UPRR ROW. The riprap would be temporarily relocated immediately adjacent to the pipeline, and the pipeline would be exposed to provide access for grouting activities. The riprap would then be replaced to cover the cut and capped end of the wastewater pipeline, resulting in a shoreline similar to existing conditions to continue protecting five pipelines abandoned from the Coscol Project (Figure 2-1). Disturbance is not anticipated to the surface of Park, existing or planned Bay Trail sections, or UPRR railroad tracks.

**Offshore Work.** The offshore work in the Bay would remove the entire offshore portion of pipeline (both the buried and exposed portions as seen in Figure 1-2), three diffusers, and three steel plates under CSLC jurisdiction. The removed items would be transported to a permitted and appropriate recycling or disposal facility.

### 2.5 PROJECT CONSTRUCTION SCHEDULE, PERMITS, AND EQUIPMENT

**Construction Schedule.** The Project is expected to be completed over an approximately 3-week period. Project-related activities would be performed between the hours of 7 AM to 5 PM on weekdays, unless extended work hours are approved by the City. No night work would be performed during the 3-week work period.

**Permits.** Prior to commencement of the Project, the Applicant must obtain permits and environmental reviews from applicable agencies as outlined in Section 1.7. All onshore and in-water construction 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 U.S. Coast Guard (USCG) regulations.

**Equipment.** Equipment required to implement the Project consists of the following:
- A derrick barge equipped with two spuds and four anchors (spuds and anchors are controlled by deck-mounted winches) and electrical generator (only during the offshore pipeline work);

- A crane barge equipped with a crane and clamshell bucket, grout plant, grout pump and grout materials, mechanical pipe plugs, spuds and anchors (which would be controlled by deck-mounted winches), and electrical generator (only during the onshore pipeline work);

- 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, 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.

**Materials.** All hazardous materials would be staged at the contractor’s shore-based facility and then transported to or from the barges or other vessels. The following materials may be required to carry out the Project:

- Diesel fuel;

- Gasoline to power the work skiff and small portable equipment;

- Compressed acetylene gas and other gases for metal cutting;

- Penetrating oil to lubricate corroded fittings;

- Lubricating oil and hydraulic oil;

- Grout for the pipeline;

- Marking paint;

- Batteries; and

- Oil spill booms and sorbent material (on-hand as a contingency).

Vessel fueling would be conducted at an approved fueling facility. No cross vessel fueling would be allowed. The marine vessels generally would contain petroleum products within tankage that is internal to the hulls of the vessels. All equipment would
use non-toxic biodegradable hydraulic fluid. All deck equipment would be equipped with drip pans to contain leaks and spills. All fuels and lubricants in containers or equipment aboard the work vessels would have a double containment system. Chemicals used on the marine vessels would be stored using secondary containment. A sufficient supply of absorbent booms and pads would be available onboard the working vessels and barges to recover any spilled hydrocarbon containing fluids or other hazardous liquids.

Contractor’s Shore-based Marine Facility. Activities at the contractor’s shore-based facility would include routine transportation and use of hazardous materials. All activities would occur under current permits; all applicable permits would be required by the Applicant contract. The Applicant has not currently selected a contractor to perform this Project. The selected contractor’s shore-based marine facility would be used as a base for the contractor’s equipment, barges, materials, and handling and transferring the pipeline sections from the barge to the trucks for offsite disposal. Based on a list of companies provided by the Applicant that have expressed interest in bidding on the Project, the marine facility would likely be located at one of the existing permitted commercial/industrial facilities listed below:

- C.S. Marine Constructors, Inc. has an available shore facility at Mare Island at 425 15th Street, Mare Island Berth 19, Vallejo; and
- Power Engineering Construction has an available shore facility at the former Naval Air Station in Alameda.

2.6 WASTEWATER PIPELINE REMOVAL WORK DESCRIPTION

The following sections present a detailed description of the proposed Project equipment use and construction work, both onshore (Section 2.6.1) and offshore (Section 2.6.2).

2.6.1 Onshore Portion of the Pipeline Removal Work

Onshore work would occur on land owned by the CSLC and in the UPRR ROW. All of the pipeline on the CSLC property would be removed, with the remaining section of onshore pipeline abandoned in place. Temporarily removed riprap would be placed to cover the cut and capped end of the wastewater pipeline to result in a shoreline similar to existing conditions (Figure 2-1).

Expected Equipment Use. The onshore work would be done from the water. A tugboat 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 onshore work. The barge would be mobilized to the work location from the contractor’s shore-based marine facility. When feasible, the barge would use spuds to secure its position.
The spuds would minimize anchoring and disturbance to the surrounding sediments. During low tides the barge may rest on the sediment surface until the rising tide.

The barge would have a five- to seven-person crew and the tugboat would have a two-person crew. A crew boat would ferry key personnel to and from the barge, while a tugboat, working skiff, or the crew boat would bring materials to the barge as needed. The barge would be located close to the shore, and other personnel would access the barge via a gangway from the land. (The personnel gangway would be hauled onto the barge every night for security purposes (i.e., to prevent unauthorized access)). This approach would reduce crew boat use and enhance personnel safety by minimizing crossings of the railroad tracks. Trips would be minimized and vessel speeds in this area would be limited to no-wake to further minimize disturbance to fish and sediments in the immediate vicinity.

**Construction Work.** Onshore work would occur from the water over an approximately 5-day period, using a four-step process, as follows.

1. A small area of riprap (30 feet long x 10 feet wide x 5 feet deep) on the west side of the railroad tracks between the railroad track ballast and the Bay would be removed to expose the pipeline.

2. The exposed section of pipeline, and if necessary the pipeline sleeve, would be cut at or near the mudline and near the top of the embankment where the pipeline extends onto the UPRR ROW (outside of the CSLC’s jurisdiction); the cut section will be removed.

3. The wastewater pipeline in the sleeve below the railroad tracks and extending to the wastewater pipeline’s end in the Park would be grouted and left in place; the sleeve surrounding the pipeline would be grouted as well.

4. The riprap would be replaced along the shoreline (on both UPRR and CSLC properties) to continue to protect the previously abandoned pipelines from the Coscol Project (see Figure 2-1). Best management practices (BMPs) would be employed to prevent sediment, grout or other construction materials from entering the Bay (see Section 2.6.1.3 below).

The onshore work would occur in 10-hour shifts from approximately 7 AM to 5 PM during the weekdays to comply with the city of Hercules 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 USCG regulations.

Although little dust is expected from the onshore work, applicable dust-control measures described in the Bay Area Air Quality Management District CEQA Guidelines (BAAQMD
1999) will be implemented to minimize construction-related dust. These practices could include watering active construction areas daily if shoreline materials are dry (trails would not be watered) and ensuring that grout is mixed in a wind-protected environment and in a manner that minimizes dust generation. BMPs would also be implemented to avoid potential erosion, including scheduling Project work to avoid storm events, protection of any stockpiled material, and limiting the exposed area of soils.

2.6.1.1 Riprap Removal

The crane on the crane barge would be used to access the riprap area on the Bay (west) side of the railroad tracks. The crane would use a clamshell bucket to temporarily remove the riprap, stockpile it atop other riprap, and, after completion of the grouting, replace the riprap to cover the cut and capped end of the pipeline. The volume of rock to be relocated would be approximately 55 cubic yards (30 feet long x 10 feet wide x 5 feet deep). Authorization would be obtained from UPRR before the start of work.

2.6.1.2 Wastewater Pipeline Cut and Removal

Once the pipeline is exposed by removal of the riprap, it would be cut at or near the mudline and near the top of the embankment where it extends into the UPRR ROW. The cut section of the pipeline may include a short section of the steel casing sleeve. The pipe would be cut using an oxy-acetylene torch, using an approximately three- to four-person crew as needed to safely complete the work. The estimated duration of the work is 1 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 an appropriate recycling and/or disposal facility.

2.6.1.3 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. The sleeve surrounding the pipeline would also be grouted. Operations would be confirmed with UPRR prior to commencing activities.

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 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 onshore 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 1 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.

2.6.1.4 Riprap Replacement

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

2.6.2 Pipeline Removal in San Pablo Bay (CSLC Jurisdiction)

Expected Equipment Use. A derrick barge and a tugboat would be used to remove the portion of the wastewater pipeline located in the Bay. This would include the approximately 2,000 linear feet of pipeline, three diffusers, and the three steel plates that secure the pipeline near the diffusers. The barge would have a five-to seven-person crew plus three 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, in which case both spuds and anchor(s) could be used simultaneously. The need for spuds and/or anchor would depend on the need to move or hold position. 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.

Construction Work. Pipeline removal in the Bay is expected to require approximately 2 weeks. Approximately 150 to 200 feet of pipeline would be removed each day. The work would occur in 10 hour shifts from approximately 7 AM to 5 PM during weekdays. Work
during the daylight hours without the use of lights would minimize disturbance to fish, other wildlife, and the public in the Project vicinity. 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 USCG regulations.

Pipeline removal would begin at the western end (diffusers) of the pipeline, approximately 2,000 feet offshore (Figure 1-2). Divers would attach straps and lines to the end of the pipeline, and a barge-mounted winch would slowly lift the pipeline up through the sediment and water onto the barge. 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. 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.

Localized turbidity would occur temporarily as each segment of the pipeline is raised. Sediment would only be resuspended at the point where the pipeline is pulled above the top of the sediment into the water because the pipeline will be slowly lifted from the sediment and through water column. 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. 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, and would remain in place until sufficient water depth is available to lift the barge off the bottom. 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 acre).

The wastewater pipeline would be pulled onto the barge. 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 a section of the pipeline has been extracted and placed on the barge, divers and barge 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. This procedure would continue shoreward with lifting pipeline, attaching it to the barge, and cutting sections. 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 twenty 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.

Assuming the pipe weighs approximately 30 pounds per foot, and the average truckload
can accommodate 15 tons, two trucks could accept the entire weight of the pipeline.
However, the actual number of trips required would be based on the number of pipe
sections (volume) each truck could transport. Assuming conservatively that each truck
could transport twenty 50-foot sections, five truck trips would be required to transport
the 2,000 feet of pipeline, plus the 20-foot section removed from underneath the riprap.

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

2.6.2.1 Project Construction Plans

As noted in Section 1.7, the contractor would be required to prepare numerous plans to
ensure the construction work is carried out in a safe and environmentally sound
manner. The plans and other documentation that would be prepared are briefly
described below. For both the onshore and offshore portions of the Project spuds would
be used to affix the barges in place and reduce the need for anchoring. The contractor
would be required to minimize anchoring and disturbance to the surrounding sediments.
If anchoring is deemed necessary due to wind or current conditions, anchoring practices
would follow the Anchoring Plan to minimize near shore and offshore disturbance. The
Anchoring Plan would require that the use of mooring anchors by vessels and barges
be minimized. The anchoring plan would further specify that if mooring anchors must be
used, then a work skiff would be used to deploy and retrieve the anchors and that the
anchors would not be dragged along the seafloor.

Construction Work Plan

The Construction Work Plan would be prepared by the Applicant or its contractor and
approved by CSLC staff prior to pipeline removal. It is standard industry practice to
require specific safety, communication, and environmental control plans to ensure safe
work practices and to limit liability and indemnification under contracting and insurance
requirements for maritime construction. Contracting requirements specify that the
contractor is responsible for furnishing all materials, labor, tools, equipment,
supervision, and quality control (QC) procedures necessary to conduct construction activities. The contractor shall also provide for and conduct all necessary BMPs, as defined in the contract, during the work in order to comply with permit conditions and to avoid or minimize potential environmental impacts. Standard plans that are required would include the following components:

- Barge and Shore Base Hazardous Materials Inventory,
- Hazardous Materials Management Plan,
- Oil Spill Prevention and Response Plan,
- Grout Management Plan,
- Marine Safety Plan,
- Debris Removal Plan,
- Rigging and Lifting Plan,
- Marine Communication Plan,
- Marine Transportation Plan,
- Navigation Marking and Lighting Plan, and
- Anchoring Plan.

With the exception of the Oil Spill Prevention and Response Plan and the Grout Management Plan, all plans listed above are routine part of planning a project involving construction in the Bay. The proposed contents of the Oil Spill Prevention and Response Plan and the Grout Management Plan are summarized below.

**Oil Spill Prevention and Response Plan**

Prior to the start of project work, the Applicant will develop and submit to the CSLC staff an Oil Spill Prevention and Response Plan to minimize the potential for accidental releases of fluids such as hydraulic fluids, solvents, oils, and residual fluids from marine vessels. Onshore activities are subject to spill prevention, control, and countermeasure (SPCC) regulations in 40 Code of Federal Regulations (CFR) Part 112; if the contractor’s shore-based facility typically stores petroleum products above threshold amounts, the facility would be required to have an SPCC plan.

**Grout Management Plan**

Prior to the start of activities, Applicant would provide a Grout Management Plan to the CSLC staff to prevent the loss of grout, in all forms, to the environment and ensure the removal of any residual cured grout from the ground surface. It would also address the handling of dry grout, mixing, pumping, and disposition of excess and residual material. The Grout Management Plan will include measures to be implemented by the Applicant to reduce the potential for release of grout, in all forms, to the environment.