CALIFORNIA COASTAL COMMISSION
CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877
WEB: WWW.COASTAL.CA.GOV

F12a

Filed:	3/26/2020
Action Deadline:	7/8/2020
Staff:	Alexandra McCoy - SC
Staff Report:	8/28/2020
Hearing Date:	9/11/2020

STAFF REPORT: CDP HEARING

Application Number: 3-18-1230

Applicant: Port San Luis Harbor District

Project Location: Port San Luis Harbor, Avila Beach, San Luis Obispo County.

Project Description: Five-year repair and maintenance program including ongoing repair and maintenance associated with: pier structural components, boat launch facilities, channel markers, regulatory buoys, moorings, floating docks, seawalls/revetments, decking, stringers, caps, ladders, stairs, parking lot, docks, gangways, and beach grooming. Maintenance and repairs will not expand existing development past its existing permitted configuration and specifications.

Staff Recommendation: Approval with Conditions.

SUMMARY OF STAFF RECOMMENDATION

Port San Luis Harbor District (PSLHD) facilities accommodate a number of coastal-related and coastal-dependent activities, including commercial fishing and recreational boating. PSLHD proposes to undertake development associated with routine port repair and maintenance activities over a five-year period. The packaging of all of these development activities into one permit application allows for efficient processing of routine development activities associated with the operation of a major port facility. The PSLHD Maintenance Manual identifies all proposed ongoing and impromptu repair and maintenance procedures of existing facilities, including specialized repairs,

replacement, and modification of deteriorated or damaged over-water or waterfront structures or associated mechanical equipment. The Maintenance Manual also outlines the maintenance activities that occur annually to prevent unnecessary emergency repairs and to keep these visitor-serving and recreation facilities open and available to the public.

The proposed repair and maintenance activities are located entirely within the Coastal Commission's permit jurisdiction. Thus, Chapter 3 of the California Coastal Act is the standard of review. The Coastal Act requires that marine resources and the biological productivity of coastal waters be maintained and enhanced (Coastal Act Sections 30230 and 30231).

Coastal Act issues raised by the proposed long-term repair and maintenance program include: (1) the potential for injury or disturbance to marine mammals during piling installation activities; (2) the potential adverse impacts to coastal water quality due to accidental discharges or releases of construction materials; (3) the potential for new fill of coastal waters due to the installation of pier piles or repair of buoys, and (4) the potential for beach cleaning activities to injure or disturb sensitive species during their breeding season. To address these issues, PSLHD has proposed to implement a variety of mitigation measures in accordance with staff guidance, including: (1) the implementation of a "soft start" or ramp-up technique to allow fish and mammals to vacate the area before full pile driving activities commence; (2) the use of sound dampening devices to reduce the energy transmitted from the hammer into the wooden piles; (3) the use of Global Positioning System (GPS) to limit benthic disturbance when replacing moorings; (4) seasonal restrictions on beach cleaning activities to avoid the breeding season of sensitive species; (5) limiting the type and degree of timber preservative to ammoniacal copper zinc arsenate (ACZA) for replacement decking and/or pilings and dipping pilings; and (6) implementing best management practices (BMPs) to prevent spills or storm water contamination, such as daily maintenance of equipment to prevent leaks of petroleum products, adequate separation of construction materials from the water, and general good housekeeping of the site at all times (i.e., confining all trash and debris in appropriate enclosed bins and removal of refuse material weekly). Further, to minimize the damaging effects of sound to marine mammals and fish during pile driving activities, PSLHD proposed that PSLHD staff would search for marine mammals (within a 500-foot exclusion zone for cetaceans and a reduced or no foot exclusion zone for pinnipeds and otters) during such activities with the authority to halt work if those activities pose a threat to any present marine mammals. Although these measures proposed by PSLHD are appropriate, additional measures are needed to avoid or minimize potential project impacts on water quality and sensitive marine mammal species, specifically the harbor porpoise (Morro Bay stock).

Commission staff believes that with implementation of recommended **Special Conditions 1-8**, the project can be carried out consistent with the marine resource and water quality protection policies of the Coastal Act. **Special Condition 1** would codify a five-year permit term limit to allow for an evaluation of PSLHD's procedures and methodologies and limit authorized activities to those described in the Maintenance

Manual. During the term of this permit, additional opportunities to review authorized activities and evaluate effectiveness of mitigation measures would be provided by **Special Condition 6**, which requires annual reporting of authorized maintenance activities, and **Special Condition 7**, which provides the Executive Director discretion to approve minor modifications to the permit.

The marine wildlife protection measures for pile driving would be memorialized and clarified through **Special Conditions 2 and 4**. In addition to codifying the proposed above-described sound mitigation measures (i.e. soft-start and use of sound dampening devices), **Special Condition 4** would provide additional protection of marine mammals consistent with the Coastal Act by requiring a marine mammal monitor, approved by the Executive Director, tasked with observing the required marine mammal exclusion zone and pinniped behavior, and given the authority to suspend pile driving if a cetacean or sea other passed within the exclusion zone or if pinnipeds exhibit any distress. **Special Condition 4** would also require PSLHD to submit an annual report summarizing the results of monitoring activities at the end of each year. **Special Condition 2** would specify the methods to be used to obtain and report the results of the hydroacoustic monitoring plan (HMP) and clarify that the appropriate decibel limits in establishing marine mammal hazard zones are consistent with the best available science on temporary threshold shift (TTS) and permanent threshold shift (PTS) levels for special status fish species and the National Oceanic and Atmospheric Administration's (NOAA's) most up-to-date Marine Mammal Acoustic Technical Guidance to prevent adverse impacts to marine mammals. Of particular concern is the harbor porpoise, which is the most sensitive species most likely to be found at the project site. Further, **Special Condition 2** codifies the size of the exclusion zone to be observed during the installation of an initial subset of representative piles in order to establish the limits of the exclusion zone used for all subsequent pile driving activities. **Special Condition 3** requires submittal of the final hydroacoustic testing report to the Executive Director for review. Therefore, although underwater noise from the project could disturb or injure marine mammals known to be occasionally present in the area, the project is conditioned to minimize these potential effects.

Special Condition 5 requires submittal of a revised Maintenance Manual that incorporates the results of the reports required by **Special Condition 2 and Special Condition 3,** as well as additional mitigation measures into the project, such as debris containment measures below decking demolition areas to limit accidental release of demolition materials into coastal waters, and the prohibition of pile repair and replacement activities at Avila Pier given the potential for severe environmental impacts if the hydrocarbon material present there was released during pile repair or replacement activities. Finally, **Special Condition 8** would ensure that Army Corps of Engineers authorization for the program is valid throughout the course of the permit term. As conditioned by this permit, the project is consistent with the Coastal Act Chapter 3 policies regarding marine and biological resources, commercial and recreational fishing and boating, and public recreational access. Therefore, staff recommends approval as conditioned. The motion and resolution to effectuate this recommendation are found on page 5 below.

TABLE OF CONTENTS

EXHIBITS

CORESPONDENCE

I. MOTION AND RESOLUTION

Staff recommends that the Commission, after public hearing, **approve** a coastal development permit for the proposed development. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in approval of the CDP as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Motion: I move that the Commission **approve** Coastal Development Permit Number 3-18-1230 pursuant to the staff recommendation, and I recommend a **yes** vote.

Resolution to Approve CDP: The Commission hereby approves Coastal Development Permit Number 3-18-1230 and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. STANDARD CONDITIONS

This permit is granted subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment**. The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.

3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.

4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Approved Project and CDP Duration.** This CDP shall be valid for five years from the date of Commission approval, i.e. until September 11, 2025. This CDP authorizes maintenance and repair activities at the Port San Luis Harbor facilities as described in the Maintenance Manual shown in **Exhibit 3,** except as modified by the following conditions.

2. **Hydroacoustic Monitoring Plan.** PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the Permittee shall prepare a Hydroacoustic Monitoring Plan (HMP) for review and approval by the Executive Director. The HMP shall include the following elements:

    a) To prevent adverse impacts to marine mammals and fish from elevated levels of underwater sound associated with pile driving, the HMP shall outline an underwater hydroacoustic monitoring program to be implemented during the installation of an initial subset of representative piles in order to establish the limits of the exclusion zone. The exclusion zone shall be defined by the distance between the work site and the locations at which the maximum recorded peak sound pressure level (SPL) or cumulative sound exposure level (SEL) falls below the temporary threshold shift (TTS) and permanent threshold shift (PTS) levels for marine mammals and fish. The maximum SPL or SEL thresholds utilized to determine the exclusion zone shall be based on the best available science on TTS and PTS levels for special status fish species and NOAA's most up-to-date Marine Mammal Acoustic Technical Guidance.

    b) The HMP represents the hydroacoustic monitoring plan that the contractor will be responsible for implementing during piling driving activities. The HMP shall fully describe the testing program, monitoring equipment, the number of proposed hydroacoustic monitoring sessions, the hydrophone locations along the Harford Pier and in the ocean waters off of the pier, the distance of hydrophones from the active pile driving site, and shall describe the rationale for how the program will capture a representative amount of readings that address changes in bathymetry and substrate (e.g. rocky versus sandy) in the waters surrounding the pier. In addition, the HMP shall identify protocols for communicating hydroacoustic monitoring results, including any changes in the boundaries of the exclusion zone, to the approved marine mammal observer (see **Special Condition 4**).

    c) Underwater hydroacoustic monitoring devices (capable of recording both SPL and SEL at the frequencies corresponding with the hearing capabilities of special status fish species and marine mammals anticipated to be present in the project area) shall be placed at an array of increasing distances from the site of active pile driving to fully monitor the project

area and allow for multiple readings below the SPL and SEL levels associated with temporary and permanent threshold shifts (TTS and PTS).

d) A 500-foot exclusion zone for cetaceans and sea otters shall be observed during hydroacoustic testing in accordance with the **Special Condition 4(e).** Sea lions and harbor seals are subject to the requirements of **Special Condition 4(c)**.

e) If during hydroacoustic testing the SPL or SEL threshold is exceeded beyond the 500-foot exclusion zone used during HMP implementation and/or if the marine mammal monitor observes dead or injured fish in the vicinity of active pile driving operations, the exclusion zone shall be expanded or the Permittee shall implement additional feasible power reduction and/or sound dampening measures to ensure that SPL and SEL thresholds are not exceeded beyond the 500-foot exclusion zone.

f) If hydroacoustic monitoring results indicate that the size of the exclusion zone should be adjusted to be greater or lesser than 500 feet, the Permittee shall immediately implement the modified exclusion zone and shall notify the Executive Director of the change. Notification shall include a summary of hydroacoustic monitoring results that provide a justification for the modified exclusion zone.

Minor adjustments to the above HMP requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. All requirements above and all requirements of the approved HMP shall be enforceable components of this CDP. The Permittee shall undertake development in conformance with this condition and the approved HMP, unless the Commission amends this CDP, or the Executive Director provides a written determination that no amendment is legally required for any proposed minor deviations.

3. **Acoustic Monitoring Testing Report.** No more than 30 days after the completion of the required hydroacoustic testing activities, the Permittee shall submit a final hydroacoustic testing report to the Executive Director for review. The final report shall include a description of all pile driving activities, a description of the hydroacoustic monitoring equipment and protocols that were used during the pile driving activities, the results of the hydroacoustic monitoring, a determination of the necessary marine mammal exclusion zone(s) to be implemented during future pile driving activities, and a description of any observable fish and marine mammal behavior that took place during hydroacoustic testing activities.

4. **Marine Wildlife Protection Plan.** PRIOR TO ISSUANCE OF THIS COASTAL DEVELOPMENT PERMIT, the Permittee shall prepare a Marine Wildlife Protection Plan (MWPP) for review and approval by the Executive Director. The MWPP shall incorporate the following parameters to be implemented during all pile driving activities:

a) An initial ramp-up period or “soft start” procedure at the commencement of

pile-driving activities shall be implemented to avoid potential impacts to marine mammals that may be present, but undetected, in the exclusion zone. The pile driver operator shall commence pile driving operations at the lowest possible power setting with no less than a one-minute interval between each initial strike for a five-minute period. In addition, the pile driver shall employ sound dampening techniques and/or devices (such as wooden blocks, pile cushions, and/or caps) during all pile driving activities.

b) One qualified marine mammal observer (MMO), or more if required to effectively observe the entire exclusion zone, approved by the Executive Director, shall be present to conduct observations during all pile driving activities. The MMO may be a trained biologist, or a graduate or other student, but in any case, shall have experience in marine science or marine operations that includes experience observing marine mammals and differentiating normal behavior from signs of injury or distress. The MMO's duties shall be dedicated to observing marine wildlife only and shall not be assigned other pile driving-related duties. The MMO shall have the appropriate safety and monitoring equipment (e.g. binoculars) adequate to conduct his or her activities and be located at an effective vantage point in order to observe the entire exclusion zone without obstruction (e.g., from the rooftop of existing Harford Pier buildings or from another elevated surface or equipment on the Harford Pier, consistent with public safety). The MMO may not be PSLHD staff or be a member of the contracted construction crew.

c) To evaluate the effects of pile driving on pinnipeds (i.e. seals and sea lions), the following requirements shall apply:

    i. The first piles to be driven will be located as far as possible from Work Dock 2 and other known pinniped haul-out locations in the vicinity of the Harford Pier substructure so that the reaction of the pinnipeds to pile driving activities can be evaluated. The MMO shall monitor pinniped reactions during the initial pile driving strikes and then report his/her observations and related information to the Executive Director in the required Hydroacoustic Testing Report (see **Special Condition 3**).

    ii. Pinnipeds (i.e. seals and sea lions) shall be exempt from the exclusion zone requirement. Pile-driving activities shall not take place during the breeding season for seals and sea lions if pregnant and/or nursing individuals are present.

    iii. If the normal commotion of preparing the work site for the day's pile driving does not cause the resident pinnipeds (i.e. seals and sea lions) to disperse away from Harford Pier, the MMO will record this in the required logs (see subsection (d) below) and take photos of any lingering pinnipeds on the pier's substructure or at Work Dock 2.

iv. If pinnipeds remain within the vicinity of Harford Pier upon completion of soft-start pile driving activities, regular pile driving activities may proceed as long as the pinnipeds do not exhibit any observable signs of injury or distress. If one or more pinnipeds appear injured or distressed, the MMO shall direct pile driving activities to cease and shall immediately notify the Executive Director for further assistance and guidance.

d) The MMO shall maintain a daily log of observed marine mammals and their behavior that shall be of sufficient detail to determine whether the project causes observable effects to marine mammals. A copy of the MMO's logs shall be submitted to the Executive Director within a week of completion of any pile driving event. At a minimum, the daily log observations shall include:

i. The date and time that monitored pile driving activity begins and ends

ii. Pile driving activities (e.g. number of piles being driven and their location on the pier) occurring during each observation period

iii. Weather parameters (e.g., wind speed and direction, percent sky cover, visibility, precipitation)

iv. Ocean conditions (e.g., water level fluctuation, tide, etc.)

v. A map showing species, numbers, location, and, if possible, sex and age class of all observed marine mammals

vi. A description of any observable marine mammal behavior patterns, including those in response to piling driving activities, including their location and distance relative to the work site, direction of travel, and if possible, the correlation of behavior to sound pressure levels (SPLs)

vii. A description of implementation of any required mitigation measures (e.g., shutdown or delay of piling driving activities)

viii. Other human activities in the area.

e) During hydroacoustic monitoring in accordance with the HMP (**Special Condition 2**), the MMO shall establish a 500-foot exclusion zone for cetaceans and sea otters from the work site. If the MMO observes any marine mammals within this exclusion zone (except for pinnipeds – see subsection (c) above), the MMO shall notify PSLHD staff and/or the pile driving contractor staff as appropriate and require an immediate shut down of pile driving activities. Such activities may restart once the mammal(s) is/are observed to leave the 500-foot exclusion zone or is/are not observed within the 500-foot exclusion zone for at least 30 minutes.

f) Once hydroacoustic monitoring is complete, for all subsequent days of pile driving, the outer edge of the exclusion zone for cetaceans and sea otters shall be determined by the results of the hydroacoustic Monitoring Plan (**Special Condition 2**).

g) If the exclusion zone is not entirely visible (e.g., due to darkness, fog, etc.), pile driving shall not commence or continue to proceed (if it is underway) until visual conditions have improved.

h) An annual report summarizing the results of monitoring activities shall be submitted to the Executive Director at the end of each year (i.e. in December) during the five-year term of this CDP. The report shall include marine mammal observations (see subsection (e) above), descriptions of any project delays or cessation of operations due to the presence in the project area of marine mammal species subject to protection, and an evaluation of monitoring protocol effectiveness.

The requirements of the approved MWPP are to be implemented during all pile driving activities at the Harford Pier, including during hydroacoustic testing activities authorized pursuant to **Special Condition 2**. Minor adjustments to the above MWPP requirements may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. All requirements above and all requirements of the approved MWPP shall be enforceable components of this CDP. The Permittee shall undertake development in conformance with this condition and the approved MWPP, unless the Commission amends this CDP or the Executive Director provides a written determination that no amendment is legally required for any proposed minor deviations.

5. **Maintenance Manual Revisions. Within 30 days of Executive Director receipt of the final hydroacoustic monitoring report (Special Condition 3),** the Permittee shall submit, for Executive Director review and written approval, two sets of the final Maintenance Manual (**Exhibit 3**) revised as required below:

a) **The HMP, the MWPP, and the final hydroacoustic monitoring report shall be included** as appendices in the revised Maintenance Manual. The section of the Manual pertaining to pile driving activities shall state that all pile driving activities must adhere to the requirements described in these appendices.

b) **Containment Requirements.** Add the following best management practice (BMP) to Appendix A of the Maintenance Manual: “For decking replacement projects over 30 square feet, heavy-duty mesh containment netting or a floating boom shall be installed below all work areas (prior to the commencement of such decking replacement activities) where construction discards or other materials could fall into the water. Debris in the netting or the floating boom shall be cleared daily.” In addition, the description of pier decking repair materials and procedures on page 9 of

the Manual shall be amended to describe this requirement.

c) **Avila Pier Piling Repair and Replacement Restrictions.** Replace BMP 4N on page 25 of the Manual with the following language: **"**Repair, driving, and replacement of pilings at Avila Pier is not authorized under CDP 3-18-1230." The description of Avila Pier on page 8 of the Manual shall also be amended to describe these restrictions.

The Permittee shall undertake development in conformance with the approved revised Maintenance Manual. The containment requirements described in subsection (b) above are in force upon issuance of this CDP, as is the prohibition in subsection (c) above regarding piling replacement at Avila Pier.

6. **Annual Work Plan Reports.** The Permittee shall submit, for review and written approval by the Executive Director, an Annual Work Plan that lists all anticipated routine repair and maintenance for the upcoming calendar year. The Permittee shall also submit, for Executive Director review, an annual Post-Activity report that describes all work completed during the previous calendar year. The Post-Activity report shall include a description of any issues encountered in terms of ensuring compliance with that year's Annual Work Plan. The Annual Work Plan shall be submitted annually by January 31st beginning in 2021; the first Post-Activity report shall be submitted annually by January 31st beginning in 2022. These reports shall only include authorized activities described in the Maintenance Manual. If at any time PSLHD staff is unsure whether a specific activity is authorized under this CDP, PSLHD staff shall request (before such activity commences) an Executive Director determination regarding whether the activity is allowed pursuant to this CDP.

7. **Minor Modifications.** Additional development beyond the repair and maintenance activities specified in this approval shall be submitted for a determination of coastal development permit requirements (i.e., a separate coastal development permit, amendment to this permit, or waiver). Minor adjustments to the terms and conditions of this CDP may be allowed by the Executive Director if such adjustments: (1) are deemed reasonable and necessary; and (2) do not adversely impact coastal resources. Any modifications not deemed reasonable or necessary, or that may adversely impact coastal resources, shall not constitute authorized development under this CDP unless and until the Commission amends this CDP to allow same.

8. **Army Corps of Engineers (ACOE) Approval.** The ACOE permit for the repair and maintenance project is valid until March 18, 2022. Prior to that date, the Permittee shall submit evidence of a valid ACOE permit authorizing the ongoing repair and maintenance activities following the expiration of the current ACOE permit. The Permittee shall inform the Executive Director of any changes to the project required by the new ACOE authorization. Any such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this CDP, unless the Executive Director determines that no amendment is legally required.

IV. FINDINGS AND DECLARATIONS

A. PROJECT LOCATION, BACKGROUND, AND DESCRIPTION

Project Location

Port San Luis is located south of Morro Bay and north of Pismo Beach, on the northern portion of San Luis Bay, adjacent to the unincorporated coastal community of Avila Beach in San Luis Obispo County. San Luis Bay is characterized by a number of different habitats, including a rocky shoreline with offshore rocks, intermittent sandy beaches, nearshore kelp beds, bluff-top terraces backed by steep hills, and a riparian area near the mouth of San Luis Obispo Creek. A COLREGS Demarcation line[1] extends within the hook-shaped bay from the United States Army Corps of Engineers (ACOE) breakwater to Fossil Point and represents the Port San Luis Harbor District's (PSLHD's) main interest in San Luis Bay (**Exhibit 1**).

Project Background

The PSLHD provides public services and manages the various commercial and recreational uses on the land, piers, and tideland properties of the San Luis Bay. PSLHD was created in 1954 to maintain the piers in the area, and also to support commerce associated with oil and gas extraction, movement of passengers and cargo, and commercial fishing. In 1967, PSLHD developed an 8.7-acre landfill abutting the foot of the Harford Pier to serve as a parking lot, as well as a boat haul-out and repair area. PSLHD subsequently acquired various related properties adjacent to the harbor, including the access road to the pier (which extends from the end of the County right-of-way into the Harford Land Area) and 267 permanent and seasonal moorings available to the public.

Port San Luis Harbor is one of three commercial harbors located in San Luis Obispo County (with the others being Morro Bay and San Simeon). Port San Luis Harbor is a major commercial fishing harbor with commercial fish processing facilities, including offloading hoists, ice, fuel, and support facilities. In 2016, Port San Luis was the top performing Pacific hagfish port in California. Port San Luis Harbor is home to a commercial fleet, which grew from 12 boats to at least 20 boats since 2008, consisting of primarily small-scale family owned operations that target a wide diversity of fish species. In addition to commercial fishing activities, Port San Luis is a popular sport fishing site and home to the Port San Luis Boatyard, which is one of the last self-service haul-out boatyards in California, drawing vessel owners from as far as San Diego. The boatyard also sells marine supplies and outboard motors. Port San Luis Harbor is also a recreational destination for the public, with charter vessels that conduct thousands of recreational fishing trips every year. It also hosts visitor-serving facilities, including three restaurants, a live fish retailer, a small market, kayak rental, a surf school, paddle board

[1] Demarcation lines are lines established specifically to mark where inland or international navigation rules apply, and such lines must comply with the International Regulations for Preventing Collisions at Sea, 1972 (72 COLREGS).

concessions, a chandlery (i.e. supplies for boats and ships), and RV camping.

Due to the corrosive nature of the marine environment, and constant exposure to the sometimes-extreme forces of the Pacific Ocean, PSLHD facilities are in need of recurring repair and maintenance. In addition, high levels of public and commercial use of these facilities demand that the design of these facilities be well thought out, and where possible, improved, in order to accommodate the numbers of recreational boaters, commercial fisherman, and tourists that utilize harbor facilities.

Project Description

The proposed project is a five-year repair and maintenance program, and is similar to a previous CDP approved by the Commission in 2008 (CDP 3-08-005).[2] The PSLHD Maintenance Manual (Manual) (see **Exhibit 3**) describes the proposed components and procedures of PSHLD's Repair and Maintenance Program, which includes specialized repair, maintenance, and minor modification of Port-owned facilities to cover both critical and non-critical activities over the next five years to ensure safe and reliable continued and future use of existing PSLHD facilities. The Manual also includes a variety of mitigation measures (see Appendix A, or pages 23-28, of **Exhibit 3**). Repair and maintenance activities will not exceed the existing configurations of these facilities/structures and any structural repairs generally will be made with materials similar to the original construction.

The Manual identifies the locations, components, and details of the proposed repair and maintenance program, which can be generally divided up into four areas and includes the following activities for each area (see **Exhibit 2** for each of these areas):

1. **San Luis Bay:** Existing offshore facilities (including channel markers, regulatory buoys, navigation aids, and permanent and seasonal moorings) require maintenance from normal use or repairs to damage caused by storms or boating accidents. The locations of the offshore facilities are shown In **Exhibit 4**, and no new facilities are proposed.

2. **Public Piers:** PSLHD is responsible for two public piers: Harford Pier and Avila Pier. These piers require repairs on as as-needed basis by PSLHD's facilities department. Proposed activities for Harford Pier and Avila Pier include repair and maintenance of structural and safety elements including decking, stringers, caps, rails, piles (including piling replacement with new wooden piles as necessary), ladders, stairs, floating and fixed landings, hoists, and skiff racks. The piling repair component of the project includes installation of new piles (i.e. driving up to six 12-inch-diameter wooden piles per day with an impact hammer and removing existing piles by water jetting or direct pull when feasible) and repair of existing piles (i.e., using the FX-70 Fiberglass Jacket Structural Pile Repair and

[2] CDP 3-08-005 was amended to extend its authorization for another five years, i.e. until 2018. That CDP, as amended, expired on September 11, 2018.

Protection System).[3] The decking repair component includes replacement of up to 300 square feet of pier decking sections on Harford Pier (see **Exhibit 8** for Harford Pier Decking Replacement Quilt). Repair and maintenance activities will not exceed the original pier footprint and structural repairs will be made with materials similar to the original construction. No alterations to the historic quality of Harford Pier are proposed.

a. **Harford Pier** is a historic wooden pier that was originally built in 1873, is approximately 1,456 feet long with an average width of 39 feet except at its terminus, which is approximately 120 feet in width. Harford pier is supported by approximately 1,200 piles and has four public boat hoists. The Harford Pier allows for limited vehicular access and has 17 public parking spots located at its terminus. Two spots are ADA accessible and one is reserved for law enforcement from 6AM-8PM. Public spaces are available for two hours of use without charge. The pier has loading areas for deliveries, commercial fishing, and boat launching.

b. **Avila Pier** is 1,635 feet long with an average width of 20 feet except at its terminus, which is approximately 120 feet in width. Avila Pier was originally built in 1908 and then largely reconstructed in 1985 following a major El Niño storm in 1983 that destroyed half of the pier. No vehicular access is allowed on Avila Pier.

    i. **Oil Spill Clean-Up:** In 2000, Unocal (now Chevron) conducted an oil spill clean-up in Avila Beach, which included excavation of the beachfront area of the town to remove oil-contaminated soils, and replacement of a portion of Avila pier (up to Bent #7).[4] Around this time, a hydrocarbon plume (referred to as "the plume") was discovered underneath portions of Avila Pier (see map of the plume in **Exhibit 6**). Since then, PSLHD has worked closely with the Central Coast Regional Water Quality Control Board (RWQCB), the California Department of Fish and Wildlife, and Chevron to address concerns regarding the potential for release of oil from the plume during pile driving maintenance activities and to gather information on the state of the existing plume. To minimize potential for disturbance of the plume, PSLHD is not including replacement of pilings at Avila Pier "in the plume area" in this permit.

    ii. **Closure:** In 2014, a large storm damaged Avila Pier. In 2015, a

[3] However, piling repair and piling replacement at Avila Pier are not authorized by this CDP. See discussion in Section E. (Oil Spill Prevention) below.

[4] The existing Avila Beach neighborhood was a major crude oil shipping port during the 20th century. Union Oil (now Chevron), along with other companies, laid the largest oil pipeline project in the world prior to World War I (over 200 miles), which terminated in the tidewater facilities at Avila. Field storage for 27 million barrels of oil was created at a tank farm in San Luis Obispo as well as at Avila Beach. Unocal transported an average of eight to ten million barrels of crude oil and refined products per year until ceasing operations in the mid 1990's.

large group of humpback whales visited San Luis Bay, which led to a massive increase in foot traffic on Avila Pier and resulted in significant swaying of the pier. Due to concerns of structural integrity and public safety, Commission staff granted PSLHD with emergency authorization (G-3-15-0018) to close Avila Pier to the public until repair and rehabilitation of the pier was completed. About half of Avila Pier has since been opened to the public, but the most seaward half remains closed to the public. According to a 2017 engineering assessment, it is estimated that over 50 piles would need to be replaced to restore full capacity and access to the pier.

3. **Harford Land Area:** The Harford land area is a combination of reinforced concrete or asphalt over an aggregate base adjacent to a seawall/revetment armoring structure. This area includes the public boat hoists designed to haul and launch commercial and recreational vessels, a paved parking area, a boat wash-down facility, a boat repair yard, and coastal-related shops. Proposed maintenance of the mobile hoist pier includes: repair and replacement of cleats, grating, railing; maintenance and repairs of the runoff pretreatment system; and repair of concrete pilings.[5] Proposed maintenance of the trailer boat hoist includes repair and replacement of the overhead crane, fuel pump, cleats, wood decking, and floats and repairs may either be completed on the Harford land area or repaired in-place. Parking lot maintenance includes seal coating and re-striping, the repair and replacement of existing asphalt, and the replacement of concrete in the parking lot and walking paths. Proposed coastal armoring maintenance includes repair of the existing concrete seawall (no expansion in size or configuration) and riprap restacking of existing rock (no new or supplementary rock).

4. **Beaches:** The PSLHD oversees three beaches: Avila Beach, Olde Port Beach, and Fisherman's Beach. Olde Port Beach and Fisherman's Beach are located between the Harford Land Area and the mouth of San Luis Obispo Creek. Avila Beach is located between the mouth of San Luis Obispo Creek and Fossil Point. The proposed maintenance includes the creation of temporary sand berms and beach grooming. Sand berms (~two to three feet heigh) are occasionally necessary to protect facilities (i.e. lifeguard towers which are present on the beach year-round) from wave uprush and storm damage and are created with a backhoe. These berms are not deconstructed and instead either wash away or slowly reduce in size from wind and pedestrian foot traffic. Beach grooming is necessary to remove trash and debris while leaving natural material, such as kelp, on the beach. Beach cleaning activities are proposed to occur approximately once a month between Memorial Day and Labor Day and implement the best management practices outlined in "Standard Operating Procedure for Beach Cleaning" (pages 30-31 of **Exhibit 3**).

[5] Replacement of the mobile hoist piers' concrete pilings is not proposed or authorized by this CDP.

The Manual also includes a variety of mitigation measures including (but not limited to) resource protection measures, such as the use of Global Positioning System (GPS) to limit benthic disturbance when replacing moorings, and mitigation measures to protect biological resources, such as seasonal restrictions on beach cleaning activities to avoid the breeding season of sensitive species and the implementation of a "soft start" or ramp-up technique to allow fish and mammals to vacate the area before full pile driving activities commence (see Appendix A, or pages 23-28, of **Exhibit 3**). Additional mitigation measures not specified in the Manual but proposed by the Applicant include PSLHD staff searching for marine mammals (within a 500-foot exclusion zone for cetaceans and a reduced or no exclusion zone for pinnipeds and otters)[6] during pile driving activities with the authority to halt work if those activities pose a threat to marine mammals. See **Exhibit 3** for a detailed description of each respective element of the proposed repair and maintenance program, including proposed best management practices (BMPs) to protect water quality during repair and maintenance activities.

The proposed project also includes after-the-fact authorization for the placement of two new navigation channel markers in 2014, rehabilitation of the Mobile Hoist Pier in 2015, and placement of a new Lifeguard tower on Fisherman's Beach in 2016.

Notably, the proposed project does not include repairs or improvements to existing buildings on the Harford Pier or the Harford Land Area, new or supplemental shoreline armoring, or replacement of the concrete or steel pilings for either public boat hoist.

PSLHD currently has permits authorizing the proposed repair and maintenance from the ACOE (SPL-2012-00628-LM), which expires on March 18, 2022, and from the Central Coast RWQCB (34017WQ17), which expires on April 14, 2027.

B. STANDARD OF REVIEW

The proposed project site is located seaward of the mean high tide line (e.g., on beaches, piers, and offshore moorings), and on filled tidelands where the public trust may exist (e.g., parking lots and boat ramps), and thus is located within the Commission's retained CDP jurisdiction. The standard of review for development within the Commission's retained jurisdiction is the Coastal Act.

C. LAND USE PRIORITIES

The Coastal Act defines coastal-dependent and coastal-related as follows:

> **Section 30101:** "Coastal-dependent development or use" means any development or use which requires a site on, or adjacent to, the sea to be able

[6] The Applicant is requesting a reduced or no exclusion zone for pinnipeds and otters because of their abundance in the vicinity of Harford Pier. This includes Work Dock 2, on which pinnipeds regularly haul out.

to function at all.

Section 30101.3: "Coastal-related development" means any use that is dependent on a coastal-dependent development or use.

Coastal Act Section 30001.5 states, in relevant part:

Section 30001.5: The Legislature further finds and declares that the basic goals of the state for the coastal zone are to:

(a) Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources….

(c) Maximize public access to and along the coast and maximize public recreational opportunities in the coastal zone consistent with sound resources conservation principles and constitutionally protected rights of private property owners.

(d) Assure priority for coastal-dependent and coastal-related development over other development on the coast…

Coastal Act Sections 30234 and 30234.5 also provide specific protections for boating harbors and commercial fishing. They state:

Section 30234: Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30234.5: The economic, commercial, and recreational importance of fishing activities shall be recognized and protected.

Port San Luis Harbor District facilities accommodate a number of coastal-related and coastal-dependent activities, including commercial fishing and recreational boating. Marine biological resources in the Bay support numerous activities at Port San Luis including recreational fishing (which includes fishing from piers, small boats, and charter fishing boats), commercial fishing, sightseeing, whale watching, scuba diving, and bird watching, among others. Coastal-dependent and coastal-related developments are among the highest priority Coastal Act uses. As indicated, Port San Luis Harbor provides an array of commercial and recreational boating, fishing, and coastal-related opportunities. Commercial fishing and related waterfront activities in Port San Luis generate jobs, provide recreational opportunities, and draw tourists from around the world. The proposed repair and maintenance activities not only support coastal-dependent uses but are integral to such uses and therefore have a priority under the

Coastal Act. Further, commercial and recreational boating and fishing are coastal-dependent priority uses that cannot function without safe piers and maintenance of mooring facilities. Accordingly, the proposed repair and maintenance program is considered a high priority under the Coastal Act.

Coastal Act Section 30234 calls for the protection of commercial fishing and recreational boating industries, as well as upgrading such facilities where feasible. Coastal Act Section 30234.5 recognizes the economic, commercial, and recreational importance of fishing activities. PSLHD has numerous ongoing and impromptu repair and maintenance activities of existing facilities. In an effort to decrease delays and cost, PSLHD has proposed to package all repair and maintenance activities into one permit application to allow for efficient implementation of such activities required for safe operation and public use of port facilities. While the Coastal Act provides exemptions from CDP requirements for certain routine repair and maintenance activities in order to facilitate ongoing work that does not involve a risk of substantial adverse environmental impact,[7] Section 13252 of the California Coastal Commission's regulations requires a CDP for repair and maintenance in this case because the proposed activities are located in, adjacent to, and above coastal waters, and thus such activities involve a risk of substantial adverse environmental impact.

The proposed repair and maintenance program described in **Exhibit 3** is limited to activities that generally involve ordinary repair and maintenance of Port facilities. Such activities include restoration or rehabilitation of deteriorated or damaged structures, facilities, or mechanical equipment, as well as annual maintenance to prevent unnecessary emergencies repairs that have a greater risk for environmental impacts. This CDP allows PSLHD to proceed with repair and maintenance activities that are essential to maintaining and operating the commercial fishing fleet, as well as recreational boating. Therefore, the Commission finds that this project implements, and is consistent with, Coastal Act Sections 30234 and 30234.5.

D. Marine and Biological Resources

1. Fill in Open Coastal Waters

Coastal Act Section 30233 (in relevant part) addresses filling of open coastal waters, stating:

> **Section 30233(a).** The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

[7] Coastal Act Section 30610.

> (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities…
>
> (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities…

The proposed project includes potential for "filling" of open coastal waters through the replacement of pilings (including when removal of an existing piling is not possible during installation of a replacement pile[8]), the installation of new mooring blocks (to replace those broken away from a mooring float), and repairs (i.e. restacking) of riprap revetments as needed (no new or additional riprap is proposed). More precisely, these proposed activities involve re-filling of coastal waters when existing structures in coastal waters are repaired, such as pilings, within the existing footprint, as opposed to new fill per se. For example, the Mooring Map (**Exhibit 4**) shows the pre-determined locations of existing moorings that may be retrieved for repair and maintenance or replacement if necessary, but any repaired or new replacement moorings will be placed in the same location as existing moorings or where moorings had previously been placed. Another example is the existing riprap revetment along the Harford Land Area and along Avila Beach Drive waterfront (seen in **Exhibit 5**) where errant riprap that has been dislodged by extreme wave action may be retrieved and restacked.

This CDP is not intended to cover significant repairs or improvements but is instead intended to provide for the routine repair and maintenance of Port facilities, as necessary. However, the proposed project also includes after-the-fact authorization for new development that did create additional fill in coastal waters, i.e., installation of two new navigation channel markers in 2014 and rehabilitation of the mobile hoist pier in 2015. The channel markers improve the safety of boaters by providing additional navigational aids to guide boats to the Harford pier that are lighted for nighttime navigation (whereas the other existing navigation channel markers are not lighted). And rehabilitation of the mobile hoist pier occurred in the same location/footprint and allows for the continued launching of boats for public recreational and commercial fishing uses.

Projects that include, or have the potential to include, fill of coastal waters must satisfy the three-pronged test contained in Coastal Act Section 30233(a). The first prong requires that the proposed activity fit into one of seven categories of uses enumerated in Coastal Act Section 30233(a). However, in this case, because the proposed project is repair and maintenance, the Commission is solely reviewing the method by which the Applicant is proposing to implement the repair and maintenance activities, rather than the underlying use. Thus, the first prong under Section 30233(a) is not applicable for the repair and maintenance program that is the subject of this application. However, the after-the-fact authorization components

[8] Pilings, or a portion of a piling, may not be able to be removed if water jetting fails to dislodge the existing piling or if a piling is broken during removal.

of the project are subject to the first prong. The additional navigational aids and rehabilitation of the mobile hoist pier are allowable pursuant to Coastal Act Section 30233(a)(1) because they constitute an expanded port facility.

The second prong of the 30233 test requires there to be no feasible less environmentally damaging alternatives to the proposed project. The purpose of the proposed project is to perform the necessary repair and maintenance of port facilities in order to facilitate safe and reliable continued and future uses of these facilities. Therefore, avoiding the work, or the "no project" alternative, is not considered feasible because repairs are necessary to adequately maintain existing port facilities or enhance their usability by the public and commercial fishing industry. Secondly, the proposed project is to repair existing structures to existing configurations with materials generally similar to the original construction. Because the proposed work involves repair and maintenance of existing infrastructure, there are no alternative locations for the project that could entirely avoid coastal waters Further, replacement of the existing wooden pilings with alternative materials would impact the historical qualities and visual aesthetic of the pier. Based on the above considerations, the Commission therefore finds that there are no feasible less environmentally damaging alternatives to the proposed fill, and that the project therefore meets the second prong of the Coastal Act Section 30233 test.

The third and final prong of the Section 30233 test is that all feasible mitigation measures have been required to mitigate the impacts of the proposed fill. The primary impacts of the proposed fill are associated with disturbance of the benthic habitat. PSLHD proposes to implement several mitigation to ensure that repair and maintenance activities do not result in unnecessary disturbance to the benthic habitat, such as: the use of GPS when placing repaired or new moorings to ensure they are located in the same place as before; repair of existing piles with an epoxy grout instead of replacement (see further discussion of piling repair in the "Water Quality" section below) when possible; and when repair is not possible, removal of existing piles and replacement with new piles (when feasible); and limiting maintenance and repair activities in coastal waters to that which will not expand existing development past its existing permitted configuration and specifications.

Commission staff has also worked with PSLHD to implement additional mitigation measures. For example, one proposed mitigation measure relates to the existing riprap revetments (seen in **Exhibit 5**) located along the waterfront in the Harford Land Area and along Avila Beach Drive, where extreme wave action may dislodge or displace riprap boulders from existing riprap revetments. PSLHD originally proposed to include placement of supplemental riprap to existing revetments, as well as restacking of existing errant riprap, in order to protect the Harbor's facilities, including public parking. After coordination with Commission staff, PSLHD revised its project description to exclude the placement of new or supplemental riprap to the existing revetments; instead, the proposed project description provides only for the use of heavy machinery from the Harford Land Area to retrieve and restack any errant existing riprap. Thus, the existing revetment footprints will not be increased as a result of the project. Instead, the revetments' original footprints will be maintained as necessary to protect the Harford Land Area, which supports public access, recreation, and coastal-dependent uses.

The proposed project also includes after-the-fact authorization for development that did create additional fill in coastal waters. In order to ensure that further unauthorized development that may create new fill in coastal waters does not occur, the CDP will authorize the project as proposed by PSLHD, except as modified by the special conditions. **Special Condition 1** would limit authorized activities to those described in the Maintenance Manual and to a five-year permit term limit to allow for future evaluation of PSLHD's procedures and methodologies. Further, **Special Condition 6** requires submittal of annual pre-activity and post-activity reports. The pre-activity reports shall describe all anticipated repair and maintenance activities to be completed in the upcoming year and are subject to Executive Director review and approval to ensure that the proposed work is authorized under this CDP, including with respect to fill in coastal waters. The post-activity reports will describe all repair and maintenance activities completed in the previous year. **Special Condition 7** requires that any modifications to activities authorized by this CDP shall require a CDP amendment, unless the Executive Director determines that no amendment is legally necessary. With these conditions in place, the Commission finds that the third prong of Coastal Act Section 30233(a) has been satisfied and that feasible mitigation measures have been provided to minimize adverse environmental effects.

For the reasons above, and as conditioned, the Commission has determined that the project has satisfied all three prongs of the Section 30233 test and is therefore consistent with Section 30233 of the Coastal Act.

2. Biological Resources and Water Quality

Coastal Act Sections 30230 and 30231 protect marine and inland watercourse biological resources, stating:

> **Section 30230.** Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.
>
> **Section 30231.** The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Biological Resources

Port San Luis Harbor is formed by a natural outcrop on the west, i.e. Point San Luis,

and a man-made breakwater to the south. This large rock breakwater forms a protective coastal embayment that provides sheltered habitats with a relatively deep-water connection to the ocean. It supports a diverse complex of marine and coastal habitats, including open ocean, kelp forests, rocky subtidal, sandy beaches, and a coastal river mouth.

Schooling baitfish, such as anchovies and krill, attract a wide variety of marine mammals as well as birds to feed within the bay. While the abundance of some of the whale species varies seasonally, many species including seals and sea lions, porpoise, and dolphins, as well as otters, are year-round residents. Of the seasonal species, gray whales (both eastern and western populations) for instance, are typically present during their predictable migration along the coast (moving southward in the late fall/winter and northward in the spring), while others such as humpback whales are typically present during feeding aggregations in the summer months. However, marine mammal presence is difficult to predict and not all species and individuals follow these general trends. Predictions of marine mammal presence and density are typically based on average observations over many years and therefore may not reflect the actual behavior of all individuals within a species, or the variation in abundance or occurrence that may occur in a single year or season.

Endangered or sensitive species have the potential to occur within the proposed project location. They include western snowy plover (*Charadrius nivosus nivosus*), California grunion (*Leuresthes tenuis*), tidewater goby (*Eucyclogobius newberryi*), Southern sea otter (*Enhydra lutris nereis*), blue whale (*Balaenoptera musculus*), fin whale (*Balaenoptera physalus*), Black Abalone (*Haliotis cracherodii*), South-Central Coast California steelhead (*Oncorhynchus mykiss*), and giant kelp (*Macrocystis pyrifera*). The area also has a significant bird population ranging from shorebirds that make their nests on various structural developments within the harbor, or migratory birds resting during their journey on the Pacific Flyway.

The proposed project represents a comprehensive program for repair and maintenance activities necessary to maintain and improve facilities for recreational boating and commercial fishing. Proposed activities with the potential to adversely affect sensitive biological resources include beach grooming, repair or replacement of structures in coastal waters, the use and transporting of materials hazardous to marine resources, including concrete, asphalt, wood preservatives, as well as fluids and oils associated with mechanized equipment. Potential direct and indirect impacts to biological resources from operation and maintenance activities are anticipated to be similar to those associated with previously permitted activities and include damage to sensitive habitats or resources from equipment operation or interference with movement, foraging, and/or reproduction of sensitive species from equipment operation (noise, disturbance), and the discharge of harmful materials into the marine environment. Because the activities, as proposed, have the potential to impact marine resources, BMPs are incorporated into the repair and maintenance program (see Appendix A, or pages 30-31, of **Exhibit 3**) to minimize effects and special conditions (as described below) are required to provide additional protection and enhancement of coastal water quality, marine wildlife, and

habitats consistent with the Coastal Act

Beaches

The three beaches that the PSLHD maintains include Olde Port Beach, Avila Beach, and Fisherman's Beach (see **Exhibit 2**). These beaches provide primary habitat for invertebrates; forage and resting, habitat for birds, including the threatened western snowy plover;[9] and spawning habitat for California grunion, which spawn on the beach between March and September. Macrophytic wrack (e.g., algae, kelp, and seagrasses that have washed ashore) provides nutrients for invertebrates and a secondary foraging base for birds, such as gulls and plovers. The proposed project includes sand moving activities at Avila Beach and Fisherman's beach (which are both heavily used by the public), including sand berm formation (to protect adjacent lifeguard towers) and beach grooming. The removal of trash and other debris from the beach may be desirable for human health and safety and can also provide some ecological benefits through the interception of such debris prior to entry into the marine environment where it can adversely impact seabirds and marine mammals. However, the process of removing such debris from beaches has been shown to adversely impact the natural processes of the beach ecosystem and result in the reduced diversity, abundance, and functions of sandy beach flora and fauna. Mechanical beach grooming also reduces sand compaction and eliminates stabilizing vegetation, which can increase beach erosion. However, in this case, the beaches do not have any adjacent sensitive stabilizing dune habitat.

To reduce adverse environmental impacts while maintaining the beneficial aspects of trash removal, the proposed project incorporates mitigation measures to ensure all sand moving activities are conducted in a manner that will minimize disturbance and maximize environmental protections. PSLHD hired a local environmental consultant to prepare a guidance document in order to ensure that beach grooming of the beach and shorefront of Avila Beach is performed in an environmentally sensitive manner ("Standard Operating Procedure for Beach Cleaning at the San Luis Obispo Creek mouth" – see pages 30-31 of **Exhibit 3**). As proposed, the majority of the trash will be picked up by hand and kelp will be left undisturbed on the beach when possible, or moved to the wet sand area if necessary to open up beach space for public use. In addition, the proposed project includes protections for sensitive species that may be present in the vicinity of the project site, including prohibiting sand moving activities on beach areas when spawning grunion are present. The mitigation measures applicable to sand berm formation, such as seasonal restrictions on sand movement activities, will be observed to further reduce the potential for impacts to sensitive coastal resources. The Commission's staff biologist, Dr. Laurie Koteen, is in agreement with these proposed mitigations. Thus, as proposed, sand grooming and sand berm formation

[9] No nesting of snowy plovers has been observed on these beaches. Olde Port Beach and Fisherman's Beach are relatively narrow in size (and nests would be washed away during higher tides), and Avila Beach, although wider than the other two beaches, is located adjacent to a major visitor-serving area (i.e., the town of Avila Beach) and is highly used by the visiting public throughout the year and thus is not a suitable beach for nesting snowy plovers.

activities will protect special status species and coastal resources, consistent with the above-cited Coastal Act provisions.

Pile Driving[10]

The project includes the removal and installation of timber piles that support the Harford Pier on an as-needed basis. PSLHD is proposing to drive a maximum of six 12-inch-diameter wooden piles per day, for a cumulative maximum of 70 per year. Piles would be driven with an impact hammer (specifically an MKT 9B3 air hammer using a 750 cubic-feet-per-minute Compressor). The replacement piles are Douglas-fir piles treated with an ammoniacal copper zinc arsenate (ACZA) preservative and encapsulated with a continuous polymer coating. Existing piles to be replaced will be removed when feasible. Pile removal is primarily performed by water jetting. Pile removal may also occur by use of a crane or boom truck if water jetting is unsuccessful.

Because pile driving activities would be carried out both above and within marine waters, the project has the potential to result in adverse impacts to both marine organisms and the marine environment (see also "Water Quality" discussion below). Specifically, the proposed pile driving would result in the generation of elevated levels of underwater sound in nearshore waters known to support a number of species of marine mammals, including harbor seals, California sea lions, Southern sea otters, and several species of common dolphins and whales, including blue whales and fin whales. All of these species are protected under the Marine Mammal Protection Act. Several of these species are listed under the federal endangered species act, including the Southern sea otter (threatened), the blue whale (endangered), and the fin whale (endangered). Marine mammals, in particular cetaceans such as whales, dolphins and porpoises, are known to be susceptible to disturbance and injury from high levels of human-generated underwater sound (see paragraphs below). In addition, a variety of fish and invertebrate species are also known to suffer disturbance and injury as a result of elevated underwater sound levels.

Marine mammals rely on communication and and the ability to sense their environment for a variety of critical life functions (traveling, finding mates or young, foraging, etc.). Although an animal may communicate and sense its environment in many ways and with a variety of different sensory organs, because seawater is relatively opaque to light and chemicals diffuse slowly in it, marine mammals have evolved to rely primarily on sound to sense their environment and communicate. Increased anthropogenic generated noise in the marine environment has been shown to interfere with these activities and in some cases to cause internal injury,

[10] PSLHD proposes to do piling replacement at both the Harford and Avila Piers, but not in the vicinity of a buried oil plume located in the vicinity of Avila Pier. However, this CDP is conditioned to limit piling repair and replacement activities to Harford Pier only due to the existing oil plume (see **Special Condition 5(c)** and the findings in the "Oil Spill Prevention" section below), and also the extent of piling repair and replacement needed at Avila Pier. Future piling replacement and/or piling repair activities at Avila Pier will be subject to a separate CDP.

stranding, and mortality. Exposure to low levels of sound for a relatively long period of time, or exposure to higher levels of sound for shorter periods of time, may result in auditory tissue damage (damage to the sensory hair cells of the ear) or temporary hearing loss referred to as a “temporary threshold shift” (TTS). Species may recover from TTS minutes to days following exposure. An additional possible effect on hearing from loud underwater sound is referred to in the literature as a permanent threshold shift (PTS). PTS is a permanent loss of hearing and is generally accompanied by death of the sensory hair cells of the ear. Several studies carried out in recent years suggest that instantaneous exposure to a peak sound pressure level (known as SPL) as well as from accumulated exposure to a lower sound level over a longer period of time (known as cumulative sound exposure level (SEL)) can affect hearing through auditory tissue damage or TTS.

Marine mammals have been divided into hearing sensitivity groups, under the assumption that there will be differences in hearing sensitivity and dynamic hearing range between the various species. For example, it is assumed that there are only minor differences between the hearing systems of pinnipeds, and thus seals and sea lions are put into the same hearing group (NMFS 2018). NOAA (National Oceanic and Atmospheric Administration) Fisheries compiled and synthesized the best available information on the effects of anthropogenic sound on marine mammals' hearing into the NMFS (National Marine Fisheries Service) Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing. The Guidance outlines NOAA Fisheries' acoustic thresholds for onset of PTS and TTS in marine mammal hearing for all underwater sound sources. Similarly, in 2008, an interagency working group comprised of representatives of state and federal resource management agencies from California, Oregon, and Washington developed recommendations of peak and accumulated sound levels to be used as thresholds for injury to fish.

Of particular concern is the harbor porpoise (*Phocoena phocoena*) Morro Bay stock population, which would likely be the most severely affected of the marine mammal species in the project area as this species is known to be particularly sensitive to underwater noise and has limited opportunity for emigration. *Phocoena phocoena* is classified as a “high-frequency cetacean,” and as such is considered very sensitive to underwater sound because of its very acute hearing, wide hearing frequency range, and high responsiveness to sounds (Ferguson et al., 2014). As discussed, underwater anthropogenic noise, such as that produced during pile driving, can affect porpoises by damaging their hearing (i.e. TTS) or by interfering with essential activities such as feeding and reproduction (i.e. PTS). As a result, studies highlight the important of quantifying sound levels that may deter *Phocoena phocoena* so that such sound levels can be avoided in ecologically important areas used by the species for feeding, breeding, and suckling (Kastelein & Jennings, 2012). NMFS designated the Morro Bay Stock harbor porpoise’s habitat as a Biologically Sensitive Area (BIA)[11] due to the relatively small abundance estimates of just a few thousand

[11] BIA’s are created by the Cetacean Density and Distribution Mapping (CetMap) Working Group, a part of the National Oceanic and Atmospheric Administration’s (NOAA) CetSound program.

animals and their restricted geographic range (Van Parijs et al., 2015). A designated BIA identifies sites where cetaceans engage in activities at certain times that contribute to an individual's health and fitness and, ultimately, to the fecundity and survivorship of the population. The Morro Bay stock BIA extends from Point Conception to Point Sur and from land to the 200-meter isobath.[12] The highest density of the harbor porpoise Morro Bay stock population is located near the center of the population's range between Point Arguello and Point Estero, within which the project site is located. The limited range of this small and resident harbor porpoise population makes this population particularly vulnerable to anthropogenic impacts. Wood et al. (2012) provides the following discussion of the susceptibility of the harbor porpoise to noise related impacts and further elaborates on the potential for impacts that could affect specifically the Morro Bay stock population:

> "Considered a resident population (best estimate 2044 individuals, minimum 1478 individuals) with very limited opportunity for emigration, as this stock are not encountered south of Point Conception and the coastal areas north of the Investigation area are considered sub-optimal habitat, with relatively low sighting rates in NOAA surveys. Restricted movement into deeper water (>200m) is also unlikely based on strong coastal habitat preferences (mainly <91m water depth). Time period of survey is post the summer calving period and overlaps with the presumed fall breeding season and therefore considered a sensitive period."

Thus, the harbor porpoise population of Morro Bay stock is considered at high risk to potential for short-term acoustic-related prey disturbances due to residency. As harbor porpoises are sensitive to underwater sound, they will move long distances away from a loud sound source. As a result, this could cause the individuals of the Morro Bay stock to move to away from the project area, which has the highest densities of the population, to sub-optimal habitat at the ends of their range (Point Sur (north) or Point Conception (south)). This small-bodied species has a high metabolic rate requiring regular caloric intake to maintain fitness and health; therefore, there is a potential for adverse health effects if an animal were displaced into an area offering suboptimal habitat.

To minimize the damaging effects of sound to marine mammals (including the harbor porpoise) and fish during pile driving activities, PSLHD has proposed to implement several noise minimization protective measures including implementation of a "soft start" or ramp-up technique to allow fish and mammals to vacate the area before full pile driving activities commence. This process entails a slow increase in the intensity of pile-driving with initial hammer strikes at no less than a one-minute interval between each strike for a five-minute period at the commencement of pile driving activities. Additionally, PSLHD proposes to equip its pile driving equipment with sound dampening devices and techniques, such as cushion blocks or caps placed between the pile hammer and timber pile, to reduce the energy transmitted

[12] A line connecting all points in a body of water that have the same depth below sea-level; an iso-bathymetric line.

from the hammer into the wooden piles.[13] These noise minimization measures are incorporated into **Special Condition 4(a)** as part of a Marine Wildlife Protection Plan (MWPP) to be implemented during all pile driving activities**. Special Condition 4(b)** requires that an independent (i.e. not employed by PSLHD or its construction contractors) Marine Mammal Monitor (MMO) be present during all pile driving activities to effectively observe the exclusion zone and halt work if those activities pose a threat to marine mammals (see below for further discussion). The MMO may be a trained biologist, or a graduate or other student, but in any case, shall have experience in marine science or marine operations that includes experience observing marine mammals.

PSLHD proposes that the MMO will establish a 500-foot-radius Exclusion Zone (EZ) for cetaceans to minimize adverse sound impacts on these marine mammals during pile driving activities.[14] The EZ will be calculated from the radial distance of the pier bent that is being actively constructed. The MMO will have the authority to trigger an immediate shut down of pile driving activities if a marine mammal is observed within the EZ. The proposed radius of the EZ is based on previous hydroacoustic studies for impact pile driving of wooden piles in shallow waters and the resulting effect distances were calculated and enumerated in the NMFS "Marine Mammal Acoustic Guidance" user spreadsheet tools, which provides a means to estimate distances associated with the Technical Guidance's PTS onset thresholds.

Further, the proposed EZ's are based on proxy data from hydroacoustic testing results located in the California Department of Transportation's "Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish," which contains a "Compendium of Pile Driving Sound Data" that lists information on underwater sound pressure levels resulting from pile driving measured in California, Oregon, Washington, Nebraska, Idaho, Hawaii, and Alaska. Specifically, the proxy data included hydroacoustic testing results when using a 3,000-pound drop hammer (and cushion block[15]) to drive four wood piles five to fifteen feet at the Ballena Bay Marina in Alameda, California. The proxy hydroacoustic testing data used to calculate the proposed EZ is not based on the results of hydroacoustic testing done in the vicinity of the Harford Pier. Thus, the proposed exclusion zone may not represent the actual distance from active pile driving needed to prevent sound injury to marine mammals and

[13] A vibratory hammer is less disruptive to marine mammal species than an impact hammer as the underwater sound pressure levels generated by vibratory hammers are considered a continuous sound that is distributed over the time it takes to drive the piles(s). However, PSLHD owns an impact hammer and has stated that Harford Pier would not be able to accommodate the weight of a vibratory in any event. The proposed project is conditioned to require noise minimization measures and hydroacoustic testing and monitoring to protect marine mammals during pile driving activities.

[14] PSLHD proposes a reduced or no exclusion zone for pinnipeds and otters during pile driving activities, given these species prevalence in the vicinity of Harford Pier, including the haul-out on Work Dock 2. However, as discussed below, otters will be subject to the 500-foot EZ requirement.

[15] This cushion consisted of two 3/8-inch-thick layers of rubber matting, a composite plastic block, and about 7 inches of wood. The blocks were replaced when peak sound pressure levels exceeded 180 decibels. Variations of the block composition were tested on the first two piles. It appeared that the composite plastic with wood resulted in lower underwater sound pressure levels.

special status fish species, as determined with sound thresholds developed by NMFS and the multi-agency Fisheries Hydroacoustic Working Group and the NMFS Marine Mammal Acoustic Guidance. Further, although the size of exclusion zones s for marine wildlife protection is typically based on underwater sound propagation modeling showing the distance from the sound source to sound levels considered to be safe for marine wildlife, in nearshore and shallow water areas (such as those around the pier), this modeling can be technically difficult to complete and prone to error. This is because sound waves can bounce between the ocean surface and submerged features, such as rocks, and become magnified (rather than attenuating at a steady rate as can be the case in deeper waters with more homogenous conditions). For example, underwater sound recording carried out as part of a causeway repair project in shallow nearshore waters near Rincon Island in Ventura County showed that after declining steadily between 150 meters and 300 meters from the pile driving, sound levels rose again at roughly 450 meters from the source and reached levels that nearly exceeded those at the 150 meter distance. In addition, substantial progress has been made in quantifying marine mammal hearing and the effects of noise on hearing for a range of taxa in the past few years with updated Marine Mammal Noise Exposure Criteria being released annually over the past two years, with the most recent guidance published in 2019.[16]

Thus, **Special Condition 2** requires the submission of a Hydroacoustic Monitoring Plan (HMP) that includes hydroacoustic monitoring in order to determine the underwater sound levels and attenuation distances needed to establish the specific marine mammal exclusion zone boundaries to be implemented during all future pile driving activities at the Harford Pier. The HMP would specify the testing scheme and methods to be used to obtain and report the results of the hydroacoustic monitoring and will ensure that the decibel units used in establishing the marine mammal exclusion zones are consistent with the most current guidance provided by NMFS. Further, the HMP requires that an MMO be present during all pile driving activities for which hydroacoustic testing is taking place. If sound thresholds are exceeded beyond the 500-foot exclusion zone used during HMP implementation and/or if the marine mammal monitor observes dead or injured fish in the vicinity of active pile driving operations, the exclusion zone shall be expanded or additional feasible power reduction and/or sound dampening measures shall be employed. Cetaceans and otters are subject to the 500-foot EZ, but pinnipeds (harbor seals and sea lions) are not due to the relatively high population numbers of these species that are typically present in the immediate vicinity of the Harford Pier and thus it is anticipated that pinnipeds accustomed to living on the substructure of Harford Pier or near Harford Pier (i.e. Work Dock 2) will tolerate some amount of commotion and disturbance associated with the project's pile driving activities. Instead, a series of protections for pinnipeds will be implemented during pile driving activities to ensure the protection of these species (**Special Condition 4(c)**). Additionally, the HMP will include protocols for communicating hydroacoustic monitoring results, including any changes in the boundaries of the exclusion zone, to the MMO. **Special Condition 3** requires the submission of a hydroacoustic monitoring report within 30 days of completion of the

[16] Southall et al. 2019

required hydroacoustic testing activities. **Special Condition 4** further includes a number of measures to be implemented during all pile driving activities at the Harford Pier and describes the responsibilities of the MMO, which include: monitoring the exclusion zone, evaluating the effects of pile driving on pinnipeds in the project area, requiring cessation of pile driving activities if marine mammals (other than pinnipeds) enter the exclusion zone or if pinnipeds show signs of distress, the keeping of daily logs during piling driving events, and the submission of an annual report summarizing the results of that year's monitoring activities. **Special Condition 5(a)** requires the HMP, the MWPP, and the final hydroacoustic monitoring report to be added to the PSLHD Maintenance Manual. Therefore, as conditioned to require appropriate protections for marine mammals and fish species during pile driving activities, the project is consistent with Coastal Act Sections 30230 and 30231.

Benthic Habitat

There are also important fisheries that are associated with soft bottom habitats (e.g., Dungeness crab, halibut, Washington clam) in the area, yet these generally yield less overall commercial catch value than hard bottom or pelagic fisheries. Benthic fauna may be impacted (crushed and displaced) by piling replacement or riprap restacking activities. However, since natural disturbance of the harbor bottom is high and benthic fauna are generally considered to be sparse and transitory in nature, these species are not expected to be significantly adversely affected by these activities at this location. Most benthic invertebrates are able to adapt to such changes due to their ability to migrate to suitable depths and bottom habitats. Additionally, based on notes from the biotic survey of the nearshore intertidal area, there appear to be very few organisms present in the sandy areas fronting the project site. Nevertheless, mitigation measures are incorporated into the project to reduce the potential for adverse impacts to benthic organisms, such as the use of GPS to ensure repaired or replaced moorings are set back in the same location to reduce benthic disturbance, removal of existing piles when replaced with other piles where feasible (to maintain a similar amount of open benthic area), and limiting maintenance and repair activities to that which will not expand existing development past its existing permitted configuration and specifications (see **Exhibit 3**). Therefore, the proposed project will not have significant adverse impacts on benthic resources.

3. Water Quality

The proposed project involves construction within or adjacent to coastal waters, which can cause water quality impairment from sediment disturbance and runoff, equipment leaks, and spills of construction materials with the potential to adversely affect water quality through the discharge of harmful materials and disturbance of contaminated sediments in coastal waters. Of additional concern is the use of preservative-treated wood in or over aquatic environments.

Preservative-Treated Wood

Preservative-treated wood has been commonly used for the construction of piers because it is economical, easy to install, and provides protection from corrosive saltwater, fungal decay, and marine boring organisms. However, the wood

preservatives used to protect the integrity of the wood piles can adversely impact aquatic organisms, especially fish and invertebrates, by leaching into the water column or accumulating in the underlying sediment.

When piling replacement is necessary, the Port proposes to use Ammoniacal Copper Zinc Arsenate-treated (ACZA) Douglas fir piles dipped with a marine-grade epoxy/polyurethane coating to prevent leaching of the ACZA preservative into marine environment. The marine-grade polyurethane coating is applied to encapsulate all portions of the pilings from the mudline to beyond the area in contact with water. For the surface decking of the piers, PSLHD proposes to use non-dipped ACZA-treated Douglas fir lumber.

ACZA is a wood preservative that includes both copper and arsenic, which is used to prevent insect infestation, rot, and other sources of wood degradation and breakdown. Dissolved copper is highly toxic to a broad range of aquatic species. However, the arsenic, chromium, and zinc in the metal-arsenate preservatives are less toxic than copper to aquatic organisms in both freshwater and marine environments. Further, the Coastal Commissions' Coastal Water Quality Program staff produced a memorandum in 2019 with recommendations for minimizing the water quality impacts of building materials used in overwater and waterfront structures. While Commission staff recommends the use of alternative materials instead of treated wood when constructing overwater structures, such as reinforced concrete, steel, or fiber-reinforced polymer composites, the memorandum acknowledges that replacing piles in an existing treated wood structure is a valid engineering reason to use treated wood. Further, the memo states that when preservatives are used to treat wood piles and other in-water components of structures in saltwater, the best choices of approved preservatives are ACZA and Chromated Copper Arsenate (CCA)[17] (which have the lowest aquatic toxicity) if the treated wood is dipped or wrapped in a polyurethane coating.

Therefore, the proposed wood preservative for pilings and decking and the marine-grade polyurethane piling coating are consistent with the Commission's actions in other cases to minimize leaching of preservatives, and Commission Water Quality staff finds that this material is appropriate to use in coastal waters. Thus, the Commission finds that the proposed pilings are suitable for use in the Port San Luis Harbor.

However, Coastal Water Quality Program staff go further to state that given that the pesticides in wood preservatives – commonly copper – can adversely impact aquatic species, especially fish and invertebrates, and may accumulate in the underlying sediment, the use of undipped or unwrapped treated wood in or over water is of particular concern in projects with one or more of these features: 1) installation of a large amount of treated wood; 2) a low water flow rate; and 3) where populations of especially copper-sensitive aquatic organisms may be present. In this case, the

[17] In this case ACZA is being used because, unlike CCA, ACZA effectively treats and preserves Douglas fir.

proposed project also has the potential to impact marine resources and coastal water quality through the incidental release of preserved wood into the marine environment during pier decking removal and replacement. The proposed project includes decking replacement on both piers on an intermittent basis, with up to 300 square feet of pier decking sections on Harford Pier (as seen on **Exhibit 8**) and an unspecified amount of decking at Avila Pier, once it has been determined that decking must be replaced to ensure safety of the public. Due to the large areas of decking replaced during maintenance activities and the location of the pier within the San Luis Bay, which supports a wide variety of sensitive marine habitats and wildlife species, the possible leaching of ACZA from pier decking into adjacent marine waters presents a potential source of adverse impacts to both water quality and marine biological productivity. To address this issue, PSLHD proposes to retrieve any errant decking debris that may enter the water via the use of a skiff and removal by hand at the end of each decking replacement event; however, that may not capture any smaller pieces of errant decking material that enters the water prior to completion of the decking project. Further, retrieval by hand is not likely to capture pieces that become imbued with water and sink or those that have floated out into the bay. In order to ensure that the hazardous substances associated with the proposed development activities are adequately contained, consistent with Coastal Act Sections 30230 and 30231, **Special Condition 5(b)** requires the Manual to be revised to include additional protection measures to prevent foreign materials from entering the water in accordance with Commission standards. Specifically, it requires that heavy-duty mesh containment netting or a floating boom be installed below all work areas where construction discards or other material could fall into the water when replacing over 30 square feet of decking (i.e. up to five decking boards) at any one time. The Commission's staff biologist, Dr. Laurie Koteen, is in agreement with this condition.

Pier Piling Repair

The structural damage of timber piles at the waterline is commonplace in marine environments. Tidal action, saltwater exposure, marine borers, and general weathering are all examples of factors affecting the lifecycle of these structures. For timber pier pilings and concrete pilings[18] that may be damaged but do not require full replacement, the proposed project includes repair of existing wooden pier pilings using the FX-70 structural piling repair and protection system, which is essentially a fiberglass jacket that is custom-made and assembled to the precise specifications of each repair project (see page 11 of **Exhibit 3**).[19] The FX-70 system eliminates the need to dewater the site or build cofferdams as the structure can generally remain in service while the pile repair is executed. However, this type of piling repair includes the use of marine epoxy grout, which has the potential to introduce grout to the marine environment. However, the Commission's water quality staff has determined that the proposed project includes

[18] The mobile hoist pier is supported by concrete pilings and the trailer boat hoist's dock is supported by steel pilings. The permit authorizes repair and replacement of timber pilings the support the Harford Pier and repair of existing concrete pilings that support the mobile boat hoist. This permit does not authorize repair of the steel pilings that support the trailer boat hoist or replacement of any concrete or steel pilings.

appropriate containment and mitigation measures to protect water quality during piling repair activities (such piling repair activities are limited to Harford Pier only and are not allowed for Avila Pier – see Section E (Oil Spill Prevention) below and **Special Condition 5(c)**). Thus, as conditioned, the Commission finds that the proposed piling repair method will not have any significant adverse impacts on water quality.

Other BMPs

In addition, the proposed work incorporates measures to protect marine resources and coastal water quality such as a restriction on materials that can leach into the marine environment, adequate separation of construction materials from the water, and maintaining on-site spill containment devices at all times. Other BMPs will be employed throughout the project, including the immediate collection of any debris, prevention of spills, and general good housekeeping of the site at all times (see Appendix A of **Exhibit 3**). Accordingly, the project, as conditioned by the permit, will not have any significant adverse impacts on water quality.

Conclusion

The project represents a comprehensive program for repair and maintenance activities necessary to maintain and improve facilities for recreational boating and commercial fishing. Regarding the majority of the proposed routine repair and maintenance program activities, other than pile driving, such construction would be relatively minor or would occur on the Harford Land Area, avoiding the need for equipment in the water, and minimizing impacts on marine resources and water quality. The proposed project includes appropriate BMPs to protect water quality and marine resources, including maintaining good construction site housekeeping controls and procedures; a prohibition on equipment washing, refueling, or servicing over water; daily maintenance of equipment to prevent leaks of petroleum products; and precautionary measures limiting the use of certain types of chemically treated wood products. Further proposed BMPs include a “soft start” technique for pile driving; appropriate procedures for beach grooming and sand berm formation to protect grunion and other species; and the use of a Global Positioning System (GPS) when replacing moorings. To further protect marine wildlife, **Special Conditions 2, 3, and 4** require the implementation of measures to ensure that appropriate underwater sound and wildlife monitoring occurs during pile driving activities to provide protection for sensitive marine mammal and fish species. **Special Condition 5(b)** requires that debris containment measures are implemented below decking removal areas to prevent accidental release of construction or decking materials into marine waters.

As conditioned, the project is consistent with Coastal Act Sections 30230 and 30231 regarding protection of marine resources and offshore habitats and will not have any significant adverse impacts on marine and coastal resources.

E. Oil Spill Prevention

Coastal Act Section 30232 requires that development protect against the release of hazardous substances:

> **Section 30232.** Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Avila Pier was constructed in 1908 and largely reconstructed in 1985 following a major storm that destroyed about half of the pier. Unocal (now Chevron) conducted a large oil spill cleanup project of Avila Beach in 2000 to remove oil-contaminated soils under the beach town (see discussion of this above in "Project Description"). During this time, Avila Pier (up to Bent #7) was replaced and a subsurface (i.e. below the sand) petroleum hydrocarbon plume was discovered under and near Avila Pier during excavation activities (see a mapping of the plume in **Exhibit 6**). The Coastal Commission, the RWQCB, and staff from numerous other federal, state, and local agencies have worked closely with Unocal (now Chevron) since then to investigate and monitor the state of the plume, as well as complete risk assessments to analyze potential for impacts to coastal resources in the event of an oil release (catastrophic or otherwise). Studies produced in 2001 determined that the plume is a weathered asphalt-like material that is stuck to and between sand grains, buried under two to eight feet of sand (depending on the season and specific location on the beach), and is approximately two acres in size. These initial studies ultimately concluded that the petroleum-contaminated sediment did not adversely impact human health, ecological receptors, or water quality in its buried state. The agencies agreed the plume should remain undisturbed in place and recommended avoidance as the best strategy to reduce the risk of plume release as a precautionary measure, while monitoring the plume regularly to assess the potential for future incidental release. In 2013, following completion of a ten-year monitoring program to track the minimum sand cover over the plume,[20] the agencies determined that further monitoring was not warranted at that time, but also concluded that "agencies need to coordinate with Chevron for pier piling replacement and prepare a contingency plan focused on pier maintenance work in the areas of the Outlier Plume."

Since the before-mentioned 2000 repair, no piles have been driven at Avila Pier and the pier has only seen relatively minor repairs that are typically limited to the upper structure, such as replacement of deck boards and railing after being vandalized or damaged by storms. All aspects of piling replacement, including the use of heavy equipment (cranes and barges) over the water and in the intertidal zone for jetting and hammering piles (i.e., water jetting to remove and air/gravity hammers to install), is included in the proposed project with the limitation that "*replacement of wooden piles in the plume area on Avila Pier is not covered under this permit*" (see BMP 4O on page 25 of **Exhibit 3**), though no quantitative information has been provided to date on how PSLHD proposes to distinguish "near the plume." The Commission's Oil Spill Program Coordinator expresses his concerns in a Memorandum about proposed piling

[20] *2009-2011 Avila Beach Pier Plume Monitoring and Survey* prepared by TerraCosta Consulting Group, Inc.

replacement at Avila Pier as a component of the proposed project (**Exhibit 7**), stating in part that: "The concern is that jetting and hammering pier piles could disrupt the hydrocarbon plume and cause a release of hydrocarbons/hydrocarbon laden sediment into the ocean. While the likelihood of a release is believed to be low at this time, it remains a risk with the proposed pile driving operation, which could have adverse impacts to coastal resources if a spill/release does occur."

Further, Coastal Act Section 30232 requires evidence of oil spill prevention technologies, programs, and procedures "to protect against the spillage of crude oil, gas, or hazardous materials…" and also requires a proposed project to include sufficient oil spill response capability to provide "effective containment and cleanup facilities and procedures…for accidental spills that do occur." There has been no analysis of alternatives to driving piles at the plume, including the use of different piling driving/replacement methodologies, nor does the Manual include a project-specific oil contingency plan that demonstrates that effective protection, containment, and clean up equipment and procedures would be in place to protect coastal resources from potential oil spill impacts from Avila Pier piling repair/replacement, as required by Coastal Act Section 30232. However, the proposed project includes repair or replacement of pilings at Avila Pier.

For the above-stated reasons, it is not appropriate to include piling replacement at Avila Pier in this authorization of the repair and maintenance program given the potential for severe environmental impacts if the hydrocarbon material is released during pile repair or replacement activities. Such a result would be inconsistent with Coastal Act Section 30232. Furthermore, Avila Pier is currently in disrepair and in need of a significant rehabilitation project to restore the pier's structural capacity. Specifically, PSLHD was provided with emergency authorization to close Avila Pier to the public in 2015 (G-3-15-0018) when whale activity in San Luis Bay caused a massive increase in foot traffic on Avila Pier, resulting in significant swaying of the pier. The Pier has since been partially re-opened but the terminus of the pier remains closed to the public. The cumulative development required to restore the pier's structural load capacity, including with respect to piling replacement, exceeds standard repair and maintenance activities defined in Coastal Act Section 30610 and in the Commission's implementing regulations,[21] and thus necessarily falls outside of the scope of this CDP application. The Avila Pier rehabilitation project, including an alternatives analysis that addresses plume issues, shall be reviewed under a separate and distinct CDP application when plans for such become available. Thus, and for the above-stated reasons, **Special Condition 5(c)** also prohibits the repair or replacement of pilings at Avila Pier.

F. PUBLIC ACCESS AND RECREATION

The following Coastal Act policies intend to maximize public recreational access opportunities within the Coastal Zone:

[21] Title 14 California Code of Regulations Section 13252(a)(3)(A) and (B).

Section 30210. In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Section 30211. Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

Section 30213. Lower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided. Developments providing public recreational opportunities are preferred…

Section 30220. Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

Section 30221. Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

Section 30224. Increased recreational boating use of coastal waters shall be encouraged, in accordance with this division, by developing dry storage areas, increasing public launching facilities, providing additional berthing space in existing harbors, limiting non-water-dependent land uses that congest access corridors and preclude boating support facilities, providing harbors of refuge, and by providing for new boating facilities in natural harbors, new protected water areas, and in areas dredged from dry land.

The proposed repair and maintenance activities will protect and enhance the water-oriented access and recreation facilities provided by Port San Luis Harbor. However, the proposed repair and maintenance activities also have the potential to temporarily disrupt coastal access and recreation opportunities during operations. For example, the proposed maintenance program includes maintenance of the Harford Land Area parking lot such as seal coating and replacement of existing asphalt. During this work, the available number of parking spaces would be temporarily reduced. To mitigate for impacts to public access and parking, the parking lot has been divided into five distinct maintenance areas and maintenance would only happen to one or two of those areas annually and the areas to be maintained would rotate every three to five years. This ensures minimal disruption to public parking access from necessary ongoing maintenance activities. Another measure to protect public access is that beach grooming activities will be done in the early morning hours to avoid impacts to beachgoers during the late morning and afternoon peak beach-visiting hours. The proposed project will maintain and enhance public recreational access and facilities,

including for fishing, beach-going, and other visitor-serving activities, and is therefore consistent with the Coastal Act regarding public recreational access, including parking.

G. OTHER

Other Authorizations

Special Condition 1 authorizes this CDP for five years, i.e. until September 11, 2025. The ACOE Nationwide permit that authorizes this repair and maintenance program (which also requires adherence to the avoidance and minimization measures described in Manual, submittal of an annual work summary, and the prohibition of using creosote piles) expires on March 18, 2022, prior to the expiration of this CDP. In order to ensure the repair and maintenance program is authorized by all regulatory agencies, **Special Condition 8** requires the Permittee to submit evidence of a valid ACOE permit prior to its expiration.

H. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Section 13096 of the California Code of Regulations requires that a specific finding be made in conjunction with coastal development permit applications showing the application to be consistent with any applicable requirements of CEQA. Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

The Port San Luis Harbor District, acting as the lead CEQA agency, determined that the project qualifies for a categorical exemption under CEQA guidelines Section 15301. The lead agency states that, in accordance with Section 15301, the project is limited to operations, repair, and maintenance or minor alterations of existing structures involving negligible or no expansion of use. The Coastal Commission's review and analysis of land use proposals has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. The Commission has reviewed the relevant coastal resource issues with the proposed project and has identified appropriate and necessary modifications to address adverse impacts to such coastal resources. All above findings are incorporated herein in their entirety by reference.

The Commission finds that only as modified and conditioned by this permit will the proposed project avoid significant adverse effects on the environment within the meaning of CEQA. As such, there are no additional feasible alternatives nor feasible mitigation measures available which would substantially lessen any significant adverse environmental effects that approval of the proposed project, as modified, would have on the environment within the meaning of CEQA. If so modified, the proposed project will not result in any significant environmental effects for which feasible mitigation measures have not been employed consistent with CEQA Section 21080.5(d)(2)(A).

APPENDIX A – SUBSTANTIVE FILE DOCUMENTS[22]

- CDP 3-93-027
- CDP 3-97-078, -A1
- CDP 3-02-071
- CDP 3-08-005, -A1
- National Marine Fisheries Service. 2018 Revisions to: *Technical Guidance for Assessing the Effects of Anthropogenic Sound on Marine Mammal Hearing (Version 2.0): Underwater Thresholds for Onset of Permanent and Temporary Threshold Shifts.* U.S. Dept. of Commerce, NOAA. NOAA Technical Memorandum NMFS-OPR-59, 167 pp.
- Caltrans. 2015. *Technical Guidance for Assessment and Mitigation of the Hydroacoustic Effects of Pile Driving on Fish, Appendix I Compendium of Pile Driving Sound Data*. California Department of Transportation Division of Environmental Analysis. Pp. I-179 – I-180. November 2015.
- Wood, J., Southall, B.L. and Tollit, D.J. (2012) *PG&E offshore 3-D Seismic Survey Project EIR – Marine Mammal Technical Draft Report*. SMRU Ltd.
- Van Parijs, S. M., Curtice, C., & Ferguson, M. C. (Eds.). (2015). Biologically Important Areas for Cetaceans within U.S. waters. *Aquatic Mammals* (Special Issue), *41*(1). 128 pp.
- Kastelein, R. & Jennings, N. (2012) *Impacts of Anthropogenic Sounds on Phocoena phocoena (Harbor Porpoise).* The Effects of Noise on Aquatic Life, Advances in Experimental Medicine and Biology 730, DOI 10.1007/978-1-4419-7311-5 69 pp.

APPENDIX B – STAFF CONTACT WITH AGENCIES AND GROUPS

- PORT SAN LUIS HARBOR DISTRICT
- ARMY CORPS OF ENGINEERS
- CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
- CENTRAL COASTAL REGIONAL WATER QUALITY CONTROL BOARD
- NATIONAL MARINE FISHERIES SERVICE
- TENERA ENVIRONMENTAL CONSULTING

[22] These documents are available for review upon request.