

San Francisco Bay Conservation and Development Commission

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TO: Commissioners and Alternates

FROM: Lawrence J. Goldzband, Executive Director (415/352-3653; larry.goldzband@bcdc.ca.gov)
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SUBJECT: **Staff Recommendation for the Pacific Gas and Electric, California Barrell Company, LLC, and the Port of San Francisco's Potrero Power Plant and Pier 70 Shoreline Remediation Project; BCDC Permit Application No. M2017.005.00, Material Amendment No. Three**
(For Commission consideration and vote on February 21, 2019)

Recommendation Summary

Proposed

Project:

Pacific Gas and Electric (PG&E), California Barrell Company, LLC (CBC) and the Port of San Francisco (Port) are proposing to complete the remediation of the Potrero Power Plant and Pier 70 by removing or isolating legacy contaminants (PAHs) in intertidal and subtidal sediments. Studies have shown that the level of PAH contamination in the target areas has bioaccumulated in marine wildlife and is high enough that it could negatively impact humans exposed to the sediment through wading and swimming. The Commission has previously authorized portions of the site remediation project that have been completed.

The remediation areas and techniques were selected and designed to avoid and minimize impacts of PAHs to the environment, wildlife, and humans. The remediation would include: (1) mechanical dredging areas of contaminated sediment; (2) excavating and replacing riprap; (3) capping the dredged and excavated areas with both chemical and physical isolation materials to prevent further contact of residual PAHs into the Bay; (4) treating some PAHs in place in a portion of the subtidal area; (5) constructing a temporary pier and transfer system; and (6) treating the dredged and excavated materials with cement to absorb excess water at an upland site outside of the Commission's jurisdiction. Once the materials are processed, they would be trucked to an appropriate landfill for disposal also outside the Commission's jurisdiction.

Issues and

Staff Analysis: The staff believes that the primary issues raised by the application are as follows: (1) whether the proposed project is consistent with the McAteer-Petris Act and the San Francisco Bay Plan (“Bay Plan”) policies on allowable fill of the Bay; (2) whether the project is consistent with the Commission’s water quality and dredging policies; (3) whether the project is consistent with the Bay Plan policies on fish, other aquatic organisms and wildlife, tidal flats and subtidal areas; and (4) whether the project is consistent with the Bay Plan policies on climate change.

Recommended Resolution and Findings

Because the project involves a material amendment to an existing permit, the format of the recommendation is different from recommendations for new permits. This recommendation includes language from the permit, as well as the changes included in the subject amendment. Language to be deleted from the permit has been struck through and language to be added to the amended permit has been underlined. Language that has neither been struck through nor underlined is language of the existing permit that will remain unchanged with the adoption of Material Amendment No. Three. The staff recommends that the Commission adopt the following resolution:

I. Authorization

- A. **Authorized Project.** Subject to the conditions stated below, the permittees, Pacific Gas and Electric Company (PG&E), California Barrel Company, LLC (CBC), and Port of San Francisco (Port), are hereby authorized to do the following:

Location: In the Commission’s Bay and 100-foot shoreline band jurisdictions, ~~at adjoining sites~~ at the former Potrero Power Plant at 1201 Illinois Street and ~~inland of a former sugar refinery wharf~~ at the adjacent Pier 70 property, in the City and County of San Francisco (Exhibit A).

Description: Remediate subsurface contamination by undertaking the following activities:

In the Bay:

1. **Nearshore Zone – Segment 1** (Exhibits B, C, G)
 - a. Mechanically dredge approximately 1,486 cubic yards (cy) of contaminated sediments and riprap, to a depth of minus 2 to 3 feet (ft) Mean Lower Low Water (MLLW) within an approximately 20,325 sq ft area (Amendment No. Three); and
 - b. Place, use, and maintain in-kind approximately 275 cy of sand and 225 cy of aggregate within an approximately 20,325 sq ft area to cap the dredged area in 1.a. (Amendment No. Three).

~~In Northeast Area Remediation Phase:~~

~~(1) Replace, use, and maintain in-kind approximately 49 cubic yards (cy) of rock riprap material within an approximately 525-square-foot area;~~

~~(2) During the construction phase only, install and use (and remove at construction completion) two turbidity curtains and debris/absorbent booms anchored by an approximately 71-linear-foot sheet-pile wall and four piles totaling approximately 79 cy of solid fill within an approximately 107-square-foot area;~~

~~In Early Action Pile Removal Phase:~~

~~(5) Cover any hole left by pile removal that displays excessive turbidity or sheen with either clean sand or a mix of 50 percent sand and 50 percent organoclay (up to 560 cy of solid fill over approximately 251-square feet) (Amendment No. Two); and~~

~~(6) During the construction phase only, install and use turbidity control devices, including the use of turbidity curtains (to be removed at construction completion) or placement a ring of clean sand around the base of each pile prior to removal, totaling up to 10 cy of fill over approximately 251-square feet (Amendment No. Two).~~

2. Nearshore Zone – Segment 2 (Exhibits B, D, G)

- a. ~~(3) Remove a pre-existing bulkhead structure (approximately 135 cy of solid fill within an approximately 60-square-foot area) to a location outside of the Commission's jurisdiction, and construct, use and maintain in-kind an approximately 18-inch-wide, 60-linear-foot sheet pile wall;~~
- b. ~~(4) Remove approximately 80 piles generally cut to approximately 2 feet below the mudline (a net reduction of approximately 560 cy of and 250 square feet of Bay fill) (Completed) and an approximately 8-foot diameter steel bell (Amendment No. Two);~~
- c. Mechanically dredge and excavate approximately 4,610 cy of contaminated sediments, debris, piles and riprap, to a depth of minus 5 to 7 ft MLLW within an approximately 31,280 sq ft area (Amendment No. Three);
- d. In an approximately 31,280 sq ft area, place, use, and maintain in-kind a remedial cap consisting of a 31,280 sq ft reactive core mat; 1,160 cy of reactive material (such as an aggregate, bentonite and activated carbon blend); 580 cy of aggregate; and top the area with 500 cy of sand (Amendment No. Three);
- e. Place, use, and maintain in-kind approximately 280 cy of filter rock and 900 cy of rip rap within an approximately 9,290 sq ft area of the revetment (Amendment No. Three);

f. Place, use, and maintain in-kind approximately 242 cy of intermediate aggregate within an approximately 3,560 sq ft area as part of the revetment toe (Amendment No. Three);

3. Nearshore Zone – Segment 3 (Exhibits B, E, G)

a. Mechanically dredge and excavate approximately 1,350 cy of contaminated sediments and riprap to a depth of minus 3 ft MLLW within an approximately 14,950 sq ft area (Amendment No. Three); and

b. Place, use, and maintain in-kind an approximately 230 cy layer of sand and 230 cy layer of aggregate within an approximately 12,360 sq ft area as part of the erosion protection over the dredged areas (Amendment No. Three).

4. Northern Transition Zone (Exhibits B, H)

a. Place, in one event, a layer of activated carbon, (approximately 460 cy), within an approximately 74,250 sq ft area to treat moderately elevated concentrations of PAHs in the sediment; and

b. If monitoring identifies a necessity, place a second layer of activated carbon (458 cy) in the same area (74,245 sq ft) (Amendment No. Three).

5. Temporary Infrastructure (Exhibit F)

a. Construct a temporary 20-foot-wide by 128-foot-long transload deck and wharf at the northern edge of the Potrero Power Plant property supported by approximately 28, 2-foot-diameter piles, resulting in approximately 260 cy of temporary solid fill covering approximately 90 sq ft, and temporary cantilevered fill over approximately 2,560 sq ft (Amendment No. Three); and

b. Remove the temporary deck upon completion of the project, including fully removing all piles, shoreline connections, etc. (Amendment No. Three).

Within the 100-foot shoreline band:

~~In Northeast Area Remediation Phase:~~

1. Replace, use and maintain in-kind 14 cy of rock riprap material (Completed);
2. At the southeast area of the Pier 70 site, excavate approximately 527 cy of contaminated soil at two locations to approximately 25 feet below ground surface, backfill with material to existing grade, and cover surface with concrete (Completed);
3. At the northeast area of the former Potrero Power Plant, excavate approximately 20,710 square feet of contaminated soil at two locations to the approximate depth of the water table (8 to 12 feet below ground), install a temporary shoring system (e.g., sheet piles) (and remove at construction completion), perform in-situ solidification (ISS) to a maximum approximate depth of 57 feet below ground

surface, compact soils and ISS material to a depth of approximately 4 feet below ground surface, backfill with fill material to existing grade, and cover ground surface with concrete (Completed); and

4. Install and use seven groundwater monitoring wells (Completed).

5. **Shoreline Segment 2** (Exhibit H)

a. Excavate approximately 2,690 cy soil and existing riprap from within an approximately 12,600 sq ft area (Amendment No. Three); and

b. Place, use, and maintain in-kind a remedial cap consisting of a 12,600 sq ft reactive core mat, 307 cy of filter rock, and 1,012 cy of riprap over an approximately 12,600 sq ft area of shoreline that has high concentrations of PAHs (Amendment No. Three).

6. **Temporary Infrastructure** (Exhibit F)

a. Establish temporary working areas and construct temporary roadways over an approximately 20,060 sq ft area on the shoreline of CBC and Pier 70 properties, including the placement of approximately 2,230 cy of road construction materials (Amendment No. Three); and

b. Remove the temporary roadway and work area upon project completion (Amendment No. Three).

B. **Based on Application Dated.** This amended authority is generally pursuant to and limited by the original application dated February 27, 2017, the letter dated May 30, 2018, requesting Amendment No. One (time extension), ~~and your letter dated April 23, 2018, requesting Amendment No. Two, and your application dated May 31, 2018, requesting Amendment No. Three,~~ including its accompanying exhibits, subsequent submittals, and all conditions of this permit.

C. **Deadlines for Commencing and Completing Authorized Work.** Work originally authorized herein must commenced in 2018 prior to June 1, 2020, or this permit will lapse and become null and void. Such work must also be diligently pursued to completion and must be completed within one year of commencement, or and is to be completed by June 2, 2021, whichever is earlier, unless an extension of time is granted by amendment of the permit in response to a future written request by the permittees. ~~Amendment No. One granted a time extension the completion of the project authorized under the original permit until June 30, 2019.~~

The ~~work project~~ authorized in Amendment Nos. Two and Three must commence by ~~November 30, 2019~~ June 30, 2020, and must be diligently pursued to completion ~~within two years of commencement, no later than by November 30, 2021~~ 2022, unless an extension of time is granted by a further amendment of this amended permit.

The in-kind maintenance activities authorized herein are allowed as long as activities and uses authorized herein remain in place for their authorized use and as long as all relevant regulatory approvals remain valid and applicable.

II. Special Conditions

The authorization made herein shall be subject to the following special conditions, in addition to the standard conditions in Part IV:

A. Construction Plans

1. **Original Project.** The improvements authorized herein shall be built generally in conformance with the following document: *Remedial ~~Components~~ Action Plan*, prepared by Haley Aldrich, dated ~~February~~ August 2017.
2. **Amendment No. Two.** The improvements authorized by Amendment No. Two shall be built generally in conformance with the following document: *Early Action Pile Removal*, prepared by Haley Aldrich, dated March 2018.
3. **Amendment No. Three.** The improvements authorized by Amendment No. Three shall be built generally in conformance with the following document: *Offshore Sediment Area Remediation Project*, prepared by Haley & Aldrich, dated December 20, 2018.

The permittees are responsible for assuring that all construction documents accurately and fully reflect the terms and conditions of this permit submitted pursuant to this authorization. No substantial changes shall be made to these documents without prior review and written approval by or on behalf of the Commission through subsequent plan review or through future amendment(s) of this permit.

- B. **Water and Sediment Quality.** The permittees shall ensure that construction and operations authorized in the original authorization through Amendment No. One comply with the measures contained in the document entitled: *Regional Water Quality Control Board, San Francisco Bay Region, Mitigation Monitoring and Reporting Program for the Remedial Action Plan for Northeast Area of the Potrero Power Plant and a Portion of the Southeast Area of Pier 70, San Francisco, CA*, dated June 15, 2016. The permittees shall ensure that construction and operations authorized in Amendment No. Two and Amendment No. Three comply with the measures contained in the document entitled: *Conditional Water Quality Certification for the Potrero Power Plant Offshore Sediment Remedial Action Project in the City of San Francisco, San Francisco County*, dated April 9, 2018.
 1. **Dredging Equipment.** The permittees shall ensure that dredging and disposal of sediments be conducted in a manner that minimizes impacts to Bay waters. An environmental bucket shall be used for dredging to minimize suspension of contaminated sediments; if infeasible, other dredging equipment may be used in a manner minimizing impacts to Bay waters (Amendment No. Three).

2. **Turbidity Minimization.** A turbidity minimization system including silt curtains and containment booms, shall be used and monitored to ensure that the system is functioning properly during activity that would create turbidity or release contaminants in the intertidal and subtidal areas such as dredging, excavation, debris and pile removal, and placement of materials (Amendment No. Three).
3. **Creosote and Treated Wood.** No pilings or other wood structures that have been pressure treated with creosote shall be used in any area subject to tidal action in the Bay within the Commission's jurisdiction as part of the project authorized herein (Amendment No. Three).
4. **Management Plans.** The permittees shall provide the following plans to Commission staff for review and approval a minimum of 30 days prior to initiating PAH remediation activities:
 - a. Sediment Processing, Water Containment and Management Plan;
 - b. Waste Transportation and Disposal Plan;
 - c. Storm Water Pollution and Prevention Plan; and

These plans can be submitted individually or combined into a single document, and should address the sediment decant water, construction water generated by the remediation activities, and best management practices that would prevent discharges into the Bay. If the review of the plan(s) is not completed by or on behalf of the Commission within 45 days of receipt, the plan(s) shall be deemed approved (Amendment No. Three).

5. **Monitoring Program.** The permittees shall provide Risk Management and Monitoring Plan (RMMP) to Commission staff for review and approval a minimum of 45 days prior to initiating PAH remediation activities:

The RMMP shall cover a period of not less than ten years, include a post-construction monitoring program that identifies sampling and analysis location and techniques, describes data evaluation techniques, shall be implemented with 3 months of completion of the remedial action and is conducted annually. The RMMP shall also detail contingency and adaptive management measures that would be implemented should the caps or isolation layers prove ineffective, incur damage, or deteriorate over time. The basis of these measures shall be results of the sediment, biotic and/or water quality monitoring data. If the review of the RMMP is not completed by or on behalf of the Commission within 45 days of receipt, the RMMP shall be deemed approved. The monitoring report shall be prepared annually and provided to Commission staff for review and consideration by January 31st of each year following the completion of the remedial action (Amendment No. Three).

BC. Natural Resource Protection

1. **Seasonal Limitations.** Remediation activities occurring in the Bay, such as the Pile removal and installation, removal of debris, dredging and excavation of sediments and riprap, placement of the protective caps over the exposed sediment and placement of activated carbon in subtidal areas shall only occur between June 1 and November 30 of each year to minimize disturbance to salmonids, longfin smelt, and Pacific herring. Limited extensions of this construction window may be permitted after consultation and approval from the relevant resources agencies California Department of Fish and Wildlife (CDFW) and National Marine Fisheries Service (NMFS), the results of the consultation is provided to the Commission staff for review and approval, and the permittees have been notified that the Commission has approved the extension of the construction window (Amendment No. Three).
2. **Pile Driving.** Pile driving and removal may only be conducted with a vibratory hammer. Should an impact hammer be necessary due to refusal, a bubble curtain acceptable to NMFS shall be used to mitigate for increased underwater noise (Amendment No. Three).
3. **Other Protective Measures.** The permittees may employ alternative measures that are equally, or more, protective of Bay resources only after review and written approval by or on behalf of the Commission, and in consultation with the San Francisco Bay Regional Water Quality Control Board (Water Board), California Department of Fish and Wildlife, and the National Marine Fisheries Service ~~and/or~~ U.S. Fish and Wildlife Service.

D. Additional Treatment of Subtidal Sediment

1. Should the post-construction monitoring indicate that the initial treatment of the surface sediments in the Northern Transition Zone has been insufficient to decrease the bioavailability of PAHs, a second application of the authorized activated carbon (458 cy) shall be placed over the same treatment area (74,245 sq ft) (Amendment No. Three).
2. Should the post-construction monitoring of Segments 1, 2 and 3 (53,033 sq ft) indicate areas of erosion exposing the protective aggregate layer of the caps, up to 1,000 cy of sand shall be placed as needed to maintain the remediation features authorized in A.1.b, A.2.d through A.2.f and A.3.b (Amendment No. Three).
3. Should any hole left by debris or pile removal display sheen it shall be filled with either clean sand or a mix of 50 percent sand and 50 percent organoclay (up to 1,000 cy of fill) (Amendment No. Three).

- E. Completion of Project.** This project shall be fully completed as authorized, within the timeframe and using the methods described in the project description, and herein. Should the permittees find it infeasible to complete the remedial actions necessary to

isolate Bay resources and water quality from exposure to and effects of PAHs, they shall report to the Commission within 30 days of making this determination, and provide both an explanation of the issues faced, and an alternative proposal to remediate the elevated levels of contaminants (Amendment No. Three).

F. Removal of Temporary Structures. The temporary structures to be constructed in the Bay (transload deck) and in the shoreline band (work staging area and access road) shall be removed within 180 days of the completion of the remediation project (Amendment No. Three).

€G. Shoreline Protection Material, Placement, and Maintenance. Riprap material used shall be either quarry rock or specially cast or carefully selected concrete pieces free of reinforcing steel and other extraneous material and conforming to quality requirements for specific gravity, absorption, and durability specified by the California Department of Transportation or the U. S. Army Corps of Engineers. The material shall be generally spheroid-shaped. The overall thickness of the slope protection shall be no more than three feet measured perpendicular to the slope. Use of dirt, small concrete rubble, concrete pieces with exposed rebar, large and odd shaped pieces of concrete, and asphalt concrete as riprap is prohibited. Riprap material shall be placed so that a permanent shoreline with a minimum amount of fill is established by means of an engineered slope not steeper than two (horizontal) to one (vertical) unless slope is keyed at the toe. The slope shall be created by the placement of a filter layer protected by riprap material of sufficient size to withstand wind and wave generated forces at the site.

The shoreline protection improvement authorized herein shall be regularly maintained by and at the expense of the permittees, lessee, assignee or other successor in interest to the project. Maintenance shall include the collection of riprap material that becomes dislodged, the in-kind replacement of damaged or missing riprap material and associated filter fabric or other material, and the removal of debris on riprap. Within 30 days of notification by or on behalf of the Commission, the permittees or any successor in interest shall correct any identified maintenance deficiency.

ÐH. Debris Removal. All debris resulting from construction operations authorized herein shall be removed by the permittees to an upland location outside the Commission's jurisdiction. In the event that any such material is placed in any area within the Commission's jurisdiction for an extended period (i.e., more than 60 days), the permittees, their assigns, or successors in interest, or the owner of the improvements, shall remove such material, at their expense, within ten days after they have been notified by the Commission's Executive Director of such placement.

€I. Certification of Contractor Review. Prior to commencing any grading, demolition, or construction, the general contractor or contractors in charge of that portion of the work shall submit written certification that they have reviewed and understand the requirements of the permit and the final BCDC-approved plans, particularly as they pertain to environmentally sensitive areas.

III. Findings and Declarations

On behalf of the Commission, I find and declare that:

A. Authorization of Minor Repair or Improvement

1. **Original Project.** The project authorized by the original permit involves activities in the Bay and within the 100-foot shoreline band of the Commission's jurisdiction to remediate subsurface contamination resulting from former site use as a manufactured gas plant and a power plant facility.

In the Bay, the work involves, during the construction phase only, the installation and use of two turbidity curtains and debris/absorbent booms anchored by a sheetpile wall and four piles to be removed upon completion of remediation activities. Installation of the temporary sheetpile wall involves disturbance of a 525-square-foot area of an existing rock riprap revetment to be replaced in-kind. Work in the Bay also includes the removal and replacement (at an inboard location) of an existing bulkhead structure resulting in the net removal of approximately 133 cubic yards of fill within an approximately 60-square-foot area. The project authorized also includes continued ongoing maintenance of the replacement shoreline protection structures. As such, the work in the Bay involves new protective work or repairs to existing work, including riprap, that covers less than 10,000 square feet of horizontal projection of the work below the shoreline, and also involves fill removal that does not involve any substantial change in use, as defined in the Commission's Regulation Sections 10601(a)(2)(B) and 10601(a)(6), respectively, as a "minor repair or improvement."

Within the 100-foot shoreline band, the work involves the replacement of approximately 14 cubic yards of rock riprap material associated with the installation of the aforementioned sheetpile wall, excavation and backfilling of remediation areas, restoration of disturbed areas, and continued maintenance of these facilities. These activities involve the placement of small amounts of inert inorganic fill and the extraction of small amounts of materials, which will not have a significant adverse effect on present or possible future maximum feasible public access to the Bay consistent with the project, on present or possible future use for a designated waterfront park use, and the environment, and the maintenance of resulting improvements, as defined by Regulation Sections 10601(b)(1) and 10601(b)(5) as a "minor repair or improvement." The activities authorized herein also involve installation of new protective works, such as riprap, in the minimum amount necessary to stabilize existing banks, as defined by Regulation Section 10601(b)(4).

Thus, the authorized work involves "minor repairs or improvements" for which the Executive Director can issue an amendment to the permit pursuant to Government Code Section 66632(f) and Regulation Section 10622(a).

2. **Amendment No. One (Time Extension).** Amendment No. One granted a time extension for the completion of the project authorized under the original permit until June 30, 2019, and it was issued pursuant to the authority granted by Government Code Section 66632(f), Regulation Section 10810, and upon the finding that such time extension was not a material alteration of the original project authorized by BCDC Permit No. M2017.005.00. However, this amendment was issued in error as it did not extend the time previously authorized to complete the project.
3. **Amendment No. Two.** Amendment No. Two authorizes the removal of approximately 80 piles and a steel bell, placement of sediment, and use of turbidity control devices during in-water work. This work in the Bay consists of: routine repairs, reconstruction, replacement, removal, and maintenance that do not involve any substantial enlargement or change in use, as defined in the Commission's Regulation Section 10601(a)(6).

Thus, the authorized work in Amendment No. Two involves "minor repairs or improvements" for which the Executive Director can issue an amendment to the permit pursuant to Government Code Section 66632(f) and Regulation Section 10622(a).

B. Consistency with Commission Law and Policies

1. **Original Project.** The authorized project involves activities to remediate subsurface contamination consistent with a Remedial Action Plan for the Potrero Offshore Sediment Area of the Potrero Power Plant Site (2017) (RAP) approved by the San Francisco Bay Regional Water Quality Control Board (~~SFRWQCB~~ Water Board). The long-term effect of the authorized project is to reduce the potential for subsurface contaminants presently at the project site to enter the Bay. However, as the authorized activities include ground disturbance adjacent to the Bay and construction activities on the shoreline and within the Bay itself, adverse impacts to Bay water quality and marine resources have the potential to occur.

As authorized and conditioned, the project minimizes the potential for sediment, debris, or other contaminants to reach Bay waters during and following construction. The authorized project includes the installation of a turbidity barrier system and debris and absorbent booms to reduce the potential for water quality impacts or potential contaminant migration. Special Condition II-B requires the implementation of a set of mitigation measures that include a requirement to implement the ~~SFRWQCB~~ Water Board-approved Stormwater Pollution Prevention Plan (SWPPP), which contains procedures to avoid erosion of stockpiled soil, implement stockpile covering, conduct daily visual monitoring for turbidity and sheen, and for other similar measures. In addition, Special Condition II-~~DH~~ requires that any debris resulting from the construction activities is disposed outside the Commission's jurisdiction in a timely manner to avoid the potential for wind-blown debris entering the Bay.

Additional measures to protect water quality and fish and wildlife are included within the ~~SFRWQCB~~ Water Board's Mitigation Monitoring and Reporting Program for the project's RAP and are likewise required by Special Condition II.B and II.C. These measures include the requirement for a pre-construction bird survey, the use of a vibratory hammer for pile driving to lessen noise impacts and limiting work to the period between March 15th and November 30th in any year to avoid Pacific herring spawning activity ~~between December 1 and February 28 of any year~~. Any future modifications of these measures must be as, or more, protective of Bay resources and can be implemented only following the permittees' consultation with the relevant regulatory agencies, including National Marine Fisheries Service and California Department of Fish and Wildlife, and upon receipt of written approval by or on behalf of the Commission.

Special Condition II-~~CG~~ is included to ensure that the replacement shoreline protection system, including rock riprap material and a new seawall, is properly engineered and maintained to avoid the potential for adverse effects to the Bay. Special Condition II-A is included to ensure the project constructed is consistent with that authorized herein.

The project will not result in new public access at the project site, which is not presently open to the public. However, future redevelopment of a portion of the project site at Pier 70 is anticipated to improve public access on the shoreline, and the authorized project will not inhibit future development of public access facilities. The project site will be restored to pre-project conditions following remediation activities and will not affect public views of the Bay.

Therefore, as conditioned, the project authorized herein is consistent with the McAteer-Petris Act, the San Francisco Bay Plan, and the San Francisco Waterfront Special Area Plan in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay.

2. Amendment No. One. Amendment No. One granted a time extension for the completion of the work authorized in the original permit until June 2019.

23. Amendment No. Two. The authorized project in Amendment No. Two results in a net increase of up to 10 cubic yards of solid Bay fill. The fill authorized by this amended permit is for the minimum amount necessary to achieve its purpose. Special conditions are included to ensure that the nature, location and extent of authorized fill minimizes harmful effects to the Bay.

To avoid impacts to steelhead, spawning herring, and anadromous salmonids, pile removal and installation shall be limited to the months of June 1st through November 30th unless a work extension is approved by the appropriate resource agencies and biological monitoring is conducted. Pile removal shall be conducted with ~~the use~~ measures to reduce the noise generated from pile removal and reduce the potential of hydroacoustic damage to sensitive fish and marine mammals.

Construction activities have the potential to adversely affect sensitive species and water quality. To ensure that project construction and operations are protective of water quality in the Bay, special conditions are included to require implementation of best management practices identified in the ~~RWQCB~~ Water Board's Water Quality Certification issued for the project, and to prohibit use of pilings or other wood structures pressure treated with creosote. In addition, Special Condition II-E1 requires certification that the general contractor understands the requirements of this amended permit, particularly as they pertain to environmentally sensitive areas. With these and additional special conditions, the project authorized herein is consistent with the McAteer-Petris Act, the San Francisco Bay Plan, and the San Francisco Waterfront Special Area Plan in that it will not adversely affect the Bay nor public access to and enjoyment of the Bay.

4. **Amendment No. Three.** Amendment No. Three, a material amendment to this administrative permit, authorizes the remediation of sediments in the Bay and along the shoreline of the former PG&E Potrero Power Plant and Pier 70 properties. The areal extent impacted as part of this project for the removal of contaminated sediment and repairs to protective shoreline works during the remediation process exceeded the limits for administrative approval under minor repairs and improvements of Regulation Section 10601(a): requiring Amendment No. Three to be processed as a material amendment to an administrative permit.
 - a. **Allowable Fill.** In regards to the McAteer Petris Act, Section 66605, and the San Francisco Bay Plan policies on allowable Bay fill:
 - (1) **Applicable Policies.** The Commission may allow fill in the Bay only when it meets the requirements identified in Section 66605 of the McAteer-Petris Act and the San Francisco Bay Plan policies on Fills in Accord with the Bay Plan. The McAteer-Petris Act, in summary, states that further filling of the San Francisco Bay should be authorized only when: public benefits from fill clearly exceed public detriment; it is a water oriented use; no alternative upland location is available; it is the minimum necessary to achieve the purpose of the fill; it will minimize harmful effects to the Bay Area; it is constructed in accordance with sound safety standards; it would establish a permanent shoreline; and the applicant has valid title to the properties in question.
 - (2) **Proposed Bay Fill.** The project would remediate intertidal and subtidal sediments impacted by legacy PAHs. This involves dredging the contaminated sediments and placing a physical and/or reactive cap on top of the post-dredge surface. The Bay fill includes the placement of approximately 6,000 cy of chemical and physical treatment materials, capping, and erosion control materials over approximately 127,280 sq ft of intertidal and subtidal surface. The fill placed for the integrated cap design includes layers of sand, aggregate and riprap placed over the surface of the sediment, and/or a chemical treatment layer depending on the shoreline segment involved.

While this project proposes to add fill in the Bay, the fill provides a public benefit as clean materials would replace contaminated sediments and would reduce continued exposure of fish and wildlife to PAHs in Bay sediments and water on the site.

- (3) **Alternative Upland Location and Minimum Amount of Fill Necessary.** The remediation would take place in intertidal and tidal zones where the contaminants are concentrated, therefore there is no upland alternative location for the proposed project.

The proposed project would remove approximately 10,800 cy of PAH contaminated sediments and riprap from the Bay and along the shoreline, and dispose of the materials outside of the Commission's jurisdiction. Approximately 7,280 cy of this fill includes clean capping materials that are designed to contain the remaining contaminated sediments exposed on the Bay floor following dredging of the areas. The cap will cover only the areas exposed by dredging or excavation. Additionally, approximately 460 cy of activated carbon would be placed in the Transition Zone to integrate into the surface sediments and bond with PAHs to decrease their bioavailability and therefore would result in a very thin layer of fill placed over approximately 74,245 sq ft to further protect the Bay (Exhibit H). The removed riprap would be reused or replaced in-kind as shoreline protection at the site. Therefore, the proposed fill is the minimum amount necessary to reduce bioavailability of PAHs in Bay sediment and water and prevent future exposure.

In order to transfer the dredged sediments from the barges to the upland processing area, a temporary transload wharf with cantilevered deck would be constructed, covering approximately 2,650 sq ft of the Bay. In addition, approximately 20,000 sq ft of roadway and work areas would be built within the Commission's shoreline band jurisdiction, all of which would be removed once the project is completed.

- (4) **Effects on Bay Resources.** The proposed remediation project would improve Bay water and sediment quality as well as the intertidal and subtidal habitat within the project area by removing sediments with high PAH concentrations and covering the exposed surface with a reactive cap containing activated carbon that binds to the PAHs. The placement of physical isolation caps either above the reactive cap or directly onto the post-dredge surface is needed to protect the areas from erosion. In other areas not requiring a containment cap, the project would minimize potentially bioavailable PAHs from contact with Bay waters and sediments by using activated carbon to treat surface sediments and thereby improving water and sediment quality, as well as subtidal habitats, without the need to dredge.

- (5) **Safety Standards of the Permanent Shoreline.** As part of the final remediation activities, the proposed project would replace and improve a shoreline revetment along a 21,368-sq-ft section of the upland and intertidal area in Segment 2. The revetment must be removed to allow dredging of its subsoils and placement of the reactive cap and erosion control system in the area under the existing revetment. Once the dredging and capping is complete, the proposed new revetment would be constructed in the intertidal and shoreline area, and would be built to withstand a 100-year storm event, protecting the entire shoreline of Segment 2 from erosion.

A cap consisting of reactive materials covered by an erosion protection layer of sand and aggregate would be placed in the intertidal and subtidal interface of Segment 2. In Segments 1 and 3 of the Nearshore Zone, only sand and aggregate would be placed over the newly dredged surface. These protective layers provide a physical barrier to contaminant movement, and have been designed to resist erosion due to tidal and the wave forces of a 100-year storm.

- (6) **Valid Title.** California Barrel Company, LLC holds title to the former PG&E Potrero Power Plant property. The Port of San Francisco was granted ownership of the Pier 70 property and waterfront and offshore areas through the Burton Act of 1987. PG&E holds a license agreement (License L-14749 dated July 14, 2009 through its Seventh Amendment dated December 7, 2018), from the Port of San Francisco to perform the proposed remediation in the offshore areas.

Conclusion. The Commission finds that: (1) the benefits of the Bay fill resulting from the remediation of contaminated sediments, including the various capping and erosion prevention materials exceed the public detriment from the fill, (2) is a water oriented use, and has no alternative upland location, and (3) is the minimum amount necessary for the project. Special Conditions II-A and II-F are included to ensure that the project is constructed consistent with the materials contained in PG&E's application for Amendment No. Three and will not result in additional fill beyond what is authorized herein.

Sections of shoreline protection would also be replaced during the remediation and were carefully engineered to withstand wind and waves anticipated at the site. Special Condition II-G specifies materials and slopes necessary for an appropriate design for the project site.

As conditioned, the Commission finds that the proposed fill for the project is consistent with the McAteer-Petris Act and Bay Plan policies on allowable fill of the Bay.

b. Water Quality and Dredging Policies

(1) **Applicable Water Quality Policies.** The Bay Plan policies on Water Quality state, in part that “Bay water pollution should be prevented to the greatest extent feasible. The Bay’s tidal marshes, tidal flats, and water surface area and volume should be conserved and, whenever possible, restored and increased to protect and improve water quality.” The policies also state that “[w]ater quality in all parts of the Bay should be maintained at a level that will support and promote the beneficial uses of the Bay as identified in the San Francisco Bay Regional Water Quality Control Board’s *Water Quality Control Plan, San Francisco Bay Basin* and should be protected from all harmful or potentially harmful pollutants. The policies, recommendations, decisions, advice, and authority of the State Water Resources Control Board and the Regional Board should be the basis for carrying out the Commission’s water quality responsibilities.” Finally, the policies state that “[w]hen approving a project in an area polluted with toxic or hazardous substances, the Commission should coordinate with appropriate local, state and federal agencies to ensure that the project will not cause harm to the public, to Bay resources, or to beneficial uses of the Bay.”

(2) **Proposed Remediation.** The proposed remediation project is being conducted by PG&E as described in the Water Board approved RAP (2017). The project would result in the removal and treatment of PAH contaminated sediments that have been shown to bioaccumulate in the bottom dwelling invertebrates, which are fed upon by fish and can further biomagnify up the food chain. The project’s goal is to eliminate these harmful effects by removing sediments containing high concentrations of PAHs from the Bay, capping the areas with remaining contaminants to prevent additional water and sediment pollution, and neutralizing the PAHs in subtidal sediment surfaces. To that end, the site was thoroughly evaluated with the oversight of the Water Board, Environmental Protection Agency (EPA), NMFS, CDFW, U.S. Army Corps of Engineers (USACE), and BCDC, who have agreed with the proposed remediation.

To achieve the project goals, PG&E, the Port and CBC propose to dredge the areas with the highest concentration of PAHs (Segments 1, 2, and 3 of the Nearshore Zone) between the sediment at the surface and down to between 3 and 5 feet below the mudline. To minimize the movement of the lower concentrations of PAHs in the newly exposed areas, a cap consisting of activated carbon and/or sand and aggregate would be installed over the dredged area. The cap would have a final elevation approximately 6 to 12 inches below the pre-project mudline in order to allow natural accretion to take place and renew habitat in the top layer of sediment (Exhibit H).

The concentration of PAHs in Segments 1 and 3 of the Nearshore Zone were sufficiently low enough that these areas would only require a physical isolation cap. In these segments, a 6-inch thick layer of aggregate would be placed on the post-dredge surface as erosion protection overlain by a 6-inch thick layer of sand as a bioturbation promotion layer (Exhibits G, H). Within the portion of Segment 1 where the submerged marine rails remain, the dredge depth would be shallower than the 5 to 7 feet below the mudline, and only be dredged to approximately 12 inches below the pre-project mudline. Once the sediment here is removed, a sand cap approximately 2- to 6-inches thick would be added, which may be recolonized by marine organisms.

The elevated levels of contamination found in Segment 2 of the Nearshore Zone was determined to require a reactive chemical cap in addition to the physical isolation cap. In this area a reactive core mat would be placed on the post-dredge surface and topped with 12 inches of reactive material, a combination of aggregate, bentonite clay and active carbon. The reactive layer would be covered by 6-inch layers of aggregate and sand to an elevation of approximately 12 inches below mudline to protect the cap from erosion and allow the restoration of native sediment and recolonization by marine organisms. The activated carbon and reactive core mat are regularly used in remediation projects in marine environments and have been approved by the Water Board for this project.

The Transition Zone contains lower PAH concentration than the Nearshore Zone but still higher than the San Francisco Bay ambient concentrations. As a result, the northern portion of the Transition Zone would not be dredged, but instead would be treated with approximately 2 inches of activated carbon across the area to bind the PAHs in the sediment, decreasing their bioavailability.

An additional area within the Transition Zone, Cell 16, also exhibited PAH concentrations above Bay ambient. This area is far deeper than other portions of the site due to scour from a former cooling water outfall pipe and is now highly depositional. As a result, no dredging is needed, and the proposed remediation measure is to allow natural sedimentation to take place covering the PAHs over time. PG&E and the Port believe this is appropriate due to the highly accretive nature of this part of the site.

In the Water Board's April 4, 2018 Water Quality Certification, it authorized the necessary dredging, capping, upland sediment processing and disposal activities as well as the construction of a temporary dock to allow transfers of sediment from barges to trucks that transport the sediment to the upland processing area. The water quality certification also requires minimization measures such as: monitoring the turbidity control systems, sequencing work

to allow areas to return to ambient conditions before dredging other sections, and preventing any construction materials or waste from entering the Bay, as well as a variety of best management practices.

A Risk Management and Monitoring Plan (RMMP) will be prepared, reviewed, and approved before the commencement of remediation. The RMMP would include bathymetric surveys of the capped areas, evaluation of cap integrity, monitoring for erosion and deposition of sediment for a 10-year period. The RMMP would also include regular monitoring of bioaccumulation and bioavailability of PAHs over time. The results would be compared Bay ambient conditions. Monitoring of the capped areas and the activated carbon treated subtidal areas after completion of the project would allow the permittees to gauge the success of the remediation and apply adaptive management techniques if needed.

Conclusion. The remediation project would result in improved water quality resulting from the reduction of contaminants coming into contact with Bay waters due to the removal and capping of the contaminated sediments. Special Condition II-A ensures that the plans indicating the areas to be dredged and the treatment specific to the footprint are followed as each of the project's Zones and Segments differ and require particular remedial actions. Special Condition II.B identifies the plans that would further define the minimization measures and monitoring requirements and reporting for the remedial action. As conditioned, the Commission finds the project is consistent with applicable Bay Plan policies related to Water Quality.

- c. **Applicable Dredging Policies.** The Bay Plan policies on Dredging state, in part that dredging should be authorized when the commission can find that "[D]redging and dredged material disposal should be conducted in an environmentally and economically sound manner;" and that "[t]he siting and design of the project will result in the minimum dredging volume necessary for the project." The policy adds that "[t]he materials to be dredged meet the water quality requirement of the San Francisco Bay Regional Water Quality Control Board;" and that "[t]he quality of the materials disposed of is consistent with the advice of the San Francisco Water Quality Control Board."

The proposed project includes dredging of 8,100 cy of contaminated sediments, and the excavation of 2,692 cy of soil and riprap in the Nearshore Zone. Special Condition II-B.1 and 2 requires that the dredging would be done with mechanical dredges using environmental buckets to limit the loss of sediment to the water column. Silt curtains and absorbent booms will also be deployed during dredging to minimize the drifting of suspended sediments away from the contaminated areas. In areas where the use of an environmental bucket is not feasible, diver assisted dredging may be used.

The proposed dredge footprint and design depths were developed based on site investigations, including sediment quality analysis. This analysis determined the locations of elevated concentrations of PAHs and the depth at which they exist and could be remediated. The sediment that would be dredged was tested for potential impacts on water quality, species, and to identify disposal options. The results indicated that the PAHs concentrations were too high to be acceptable at a beneficial reuse site. Further analysis determined that management of the contaminated sediment would be best achieved through upland disposal as described in the Sediment Process and Management Plan required by Special Condition II-B.4.

The water quality certification requires the dredged sediment be taken upland for processing and disposal. The dredged sediment would be transferred from barge to truck using the temporary transload deck and moved to the processing location outside the Commission's jurisdiction. Once processed the dredged materials would be trucked to an upland disposal site outside of the Commission's jurisdiction.

Conclusion. The remediation project would be carried out by dredging specific locations to specific depths based on the concentration of contaminants. The project was designed to remove sediments impacted by PAHs as well as riprap in preparation for the placement of the capping materials. Given the conditions included herein, the Commission finds the project is consistent with applicable Bay Plan Dredging policies.

d. Natural Resources Policies

(1) Applicable Fish, Other Aquatic Organisms and Wildlife Policies. The Bay Plan policies on Fish, Other Aquatic Organisms and Wildlife state, in part, that "to assure the benefits of fish, other aquatic organisms and wildlife... to the greatest extent feasible, the Bay's tidal marshes, tidal flats and subtidal habitat should be conserved, restored and increased," and that "the Commission should consult with the California Department of Fish and Game [Wildlife] *sic* and the U.S. Fish and Wildlife Service or the National Marine Fisheries Service whenever a proposed project may adversely affect an endangered or threatened plant, fish, other aquatic organism or wildlife species...and give appropriate consideration of [their] recommendations in order to avoid possible adverse impacts of a proposed project on fish, other aquatic organisms and wildlife habitat."

(2) Habitat Remediation and Protection of Species. A stated goal of the proposed project is to mitigate the potential exposure of fish and wildlife to PAHs that have bioaccumulated in bottom dwelling organisms in high concentrations. To accomplish this goal, the project would remove contaminated sediments in intertidal and subtidal areas along the shoreline and treat the surface of subtidal sections of the project area

exhibiting lower concentrations of PAHs. In preparation for the project the applicants contacted CDFW and USACE, which entered into an informal consultation with NMFS on the applicants' behalf in 2018. NMFS concurred with the USACE that the project is not likely to adversely affect steelhead and green sturgeon, and CDFW determined that Pacific herring and longfin smelt would not likely be affected if the following measures are implemented:

- The dredging, disposal and surface treatments would take place during the environmental work windows of June 1 through November 30 of any year;
- Mechanical dredges with environmental buckets would be used to conduct the dredging, and diver assisted dredging would be used in areas not accessible with an environmental bucket (Segment 1 near the submerged marine rails);
- Turbidity curtains and floating booms would be deployed during dredging, with the potential use of block nets to exclude longfin smelt near divers if needed;
- Pile driving during the construction of the temporary transload deck would be conducted with a vibratory hammer. If an impact hammer is needed due to refusal at the site, the applicant would use bubble curtains acceptable to NMFS as a means to mitigate for increased underwater noise; and
- A Storm Water Pollution Prevention Plan would be developed and implemented by the applicants.

Special Conditions II-B.1,2, 4 and II-C.1 and 2 require the applicants to implement these measures.

Although the project would impact essential fish habitat, NMFS agrees that the benefit resulting from removal of concrete and wood debris, contaminated sediments from the site, and the capping of the newly exposed surfaces outweigh the temporary detriments to the habitat.

Monitoring of the capped areas and the treated subtidal areas required by Special Condition II-B.5 after completion of the project would allow the permittees to gauge the success of the remediation and apply adaptive management at the site if needed. Further, Special Condition II-E requires that the project be undertaken and completed as described.

Conclusion. As stated, remediation project goal is to mitigate the potential exposure of fish and wildlife to PAHs that have bioaccumulated in bottom dwelling organisms in high concentrations. The methods and materials to be used to reduce high levels of PAHs in the project area were chosen and designed to not be harmful to fish. The regular assessment of the caps, and the accretion of sediment over the caps and dredged areas will inform to the

effectiveness of the project and any necessary adaptive management techniques. As conditioned, the Commission finds the project is consistent with applicable Bay Plan Fish, Other Aquatic Organisms and Wildlife policies.

- e. **Applicable Tidal Flats and Subtidal Areas Policies.** The Bay Plan policies on Tidal Flats and Subtidal Areas state, in part, that “any proposed filling... or dredging project should be thoroughly evaluated to determine the effect of the project on ... tidal flats subtidal areas and designed to minimize, and avoid any harmful effects.” The policies also state that “[A]ny... restoration project should include clear and specific long-term and short-term biological and physical goals, and success criteria, and a monitoring program to assess the sustainability of the project. Design and evaluation of the project should include an analysis of: (a) how the system’s adaptive capacity can be enhanced so that it is resilient to sea level rise and climate change; (c) localized sediment erosion and accretion; (d) the role of tidal flows; (g) the expected use of the site by fish other aquatic organisms and wildlife; (i) site characterization.” Further, “a minor amount of fill may be authorized to enhance or restore... habitat based on scientific ecological analysis and consultation with the relevant federal and state resources agencies and if the Commission finds that no other method of enhancement or restoration except filling is feasible.”

As described in more detail above, the proposed remediation project addresses the PAH contaminated sediments along the former Potrero Power Plant and Pier 70 shoreline. To further limit exposure to PAHs the dredged areas would be capped with chemically reactive materials and erosion protection material where appropriate. The minor amount of fill proposed would improve the conditions of the intertidal and subtidal habitat, including water quality and sediments, its use by fish and wildlife, as well as the public. The protective caps were designed to withstand significant currents and wave action occurring during a 100-year storm event, and subsequent erosion. Additionally, the placement of the caps at lower elevations than the existing mudline would allow accretion of fine sediment to restore the area to a more natural state and provide for colonization by invertebrates.

Conclusion. Steps would be taken in order to protect tidal flats and subtidal areas while conducting the remediation project. By limiting the volume of sand, aggregate, and activated carbon placed above newly exposed dredged surfaces to the minimum amount necessary to reduce the level of PAHs, the project stayed consistent to the minor amount of fill allowed for restoration purposes. The design of the protective caps and surface treatments detailed in the plans listed in Special Condition II-A.3. reflect measures necessary to ensure that erosion does not occur as a result of the local environmental dynamics. As conditioned, the Commission finds the project is consistent with applicable Bay Plan Tidal Flats and Subtidal Area policies.

f. **Climate Change Policies**

(1) **Applicable Climate Change Policies.** The Bay Plan policies on Climate Change state, in part, that “[U]ntil a regional sea level rise adaptation strategy can be completed, the Commission should evaluate each project on a case by case basis to determine the project’s public benefits, resilience to flooding and capacity to adapt to climate change impacts. The following specific types of projects have regional benefits... and should be encouraged, if their regional benefits ... outweigh the risk from flooding: remediation of existing environmental contamination and a natural resource restoration or environmental enhancement project.”

(2) **Designing for Sea Level Rise.** The proposed project design includes remediation of a shoreline area by removing two bulkheads and removing a previously placed riprap revetment and replacing it with a more robust design. The initial revetment was engineered and constructed to withstand a 50-year storm. This revetment must be removed to complete the remediation. The replacement revetment would be built to 100-year storm criteria and would encompass the entire shoreline in Segment 2.

The impact of sea level rise was considered in the redesign of the revetment. The current still water level (mean high water) was calculated to be 5.3 ft NAVD88, and the future still water elevations were projected to be 6.2 ft NAVD88 in 2050 and 8.3 ft NAVD88 in 2100. Wave runup was calculated to be 2.8 feet for a 1-year storm and 5.6 feet for a 100-year storm. The revetment would be constructed to an elevation ranging from 11 to 13 ft NAVD88, Based on these estimates the new revetment would be resilient to the wave runup generated by a current 100-year storm (10.9 ft NAVD88), but would be over-topped by 100-year storm wave runup by mid-century. The 11 ft NAVD88 elevation of the revetment was deemed suitable for the remediation, and it is anticipated that the future redevelopment of the Pier 70 (currently under Commission consideration) and CBC properties would include an evaluation future sea levels and potential raising of the shoreline.

Conclusion. The proposed project was designed with the local hydrology in mind and the revetment would be resilient to a 100-year storm. Special Conditions II-A.3 and Special Condition II-G specify the construction details and the type of riprap to be used in the replacement of the revetment. Therefore, as conditioned, the Commission finds the project is consistent with applicable Bay Plan Climate Change policies

C. **Public Trust and Burton Act.** The Commission finds that the fill authorized herein, which is of a temporary nature and does not change the use of the land, is consistent with public trust needs for the area.

- D. **Coastal Zone Management Act.** The Commission further finds, declares, and certifies that the activity or activities authorized herein are consistent with the Commission's Amended Coastal Management Program for San Francisco Bay, as approved by the Department of Commerce under the Federal Coastal Zone Management Act of 1972, as amended.
- E. **California Environmental Quality Act.** The San Francisco Bay Regional Water Quality Control Board (~~SFRWQCB~~ Water Board), acting as lead agency, conducted an Initial Study (IS) and prepared a Mitigated Negative Declaration (MND), and found that no substantial evidence exists that the project, as mitigated, will have a significant effect on the environment. On ~~July 7, 2017~~ January 4, 2018, the ~~SFRWQCB~~ Water Board adopted the IS/MND and the Mitigation, Monitoring, and Reporting Program for ~~the project~~ Remedial Actions in the Off-Shore Areas, Pacific Gas and Electric Company, Potrero Power Plant Site.
- F. **Administrative Listing.** Pursuant to Regulation Section 10620, the original project was listed with the Commission on May 18, 2017.
- ~~G. **Enforcement Program and Civil Penalties.** The Commission has an enforcement program that reviews its permits for compliance. The Commission may issue cease and desist and civil penalty orders if violations are discovered. The McAteer-Petris Act provides for the imposition of administrative civil penalties ranging from \$10 to \$2,000 per day up to a maximum of \$30,000 per violation. The Act also provides for the imposition of court-imposed civil penalties of up to \$30,000 in addition to any other penalties, penalties for negligent violations of between \$50 and \$5,000 per day, knowing and intentional penalties of between \$100 and \$10,000 per day, and exemplary penalties, which are supplemental penalties, in an amount necessary to deter future violations. In addition, anyone who places fill, extracts materials, or makes any substantial change in use of any water, land or structure within the area of the Commission's jurisdiction without securing a permit from the Commission is guilty of a misdemeanor.~~

IV. Standard Conditions

- A. **Permit Execution.** This permit shall not take effect unless the permittee(s) execute the original of this amended permit and return it to the Commission within ten days after the date of the issuance of the permit. No work shall be done until the acknowledgment is duly executed and returned to the Commission.
- B. **Notice of Completion.** The attached Notice of Completion and Declaration of Compliance form shall be returned to the Commission within 30 days following completion of the work.
- C. **Permit Assignment.** The rights, duties, and obligations contained in this amended permit are assignable. When the permittee(s) transfer any interest in any property either on which the activity is authorized to occur or which is necessary to achieve full compliance of one or more conditions to this amended permit, the permittee(s)/transferors and the transferees shall execute and submit to the

Commission a permit assignment form acceptable to the Executive Director. An assignment shall not be effective until the assignees execute and the Executive Director receives an acknowledgment that the assignees have read and understand the permit and agree to be bound by the terms and conditions of the amended permit, and the assignees are accepted by the Executive Director as being reasonably capable of complying with the terms and conditions of the amended permit.

- D. **Permit Runs with the Land.** Unless otherwise provided in this amended permit, the terms and conditions of this permit shall bind all future owners and future possessors of any legal interest in the land and shall run with the land.
- E. **Other Government Approvals.** All required permissions from governmental bodies must be obtained before the commencement of work; these bodies include, but are not limited to, the U. S. Army Corps of Engineers, the State Lands Commission, the Regional Water Quality Control Board, and the city or county in which the work is to be performed, whenever any of these may be required. This amended permit does not relieve the permittee(s) of any obligations imposed by State or Federal law, either statutory or otherwise.
- F. **Built Project must be Consistent with Application.** Work must be performed in the precise manner and at the precise locations indicated in your application, as such may have been modified by the terms of the amended permit and any plans approved in writing by or on behalf of the Commission.
- G. **Life of Authorization.** Unless otherwise provided in this amended permit, all the terms and conditions of this amended permit shall remain effective for so long as the permit remains in effect or for so long as any use or construction authorized by this amended permit exists, whichever is longer.
- H. **Commission Jurisdiction.** Any area subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission under either the McAteer-Petris Act or the Suisun Marsh Preservation Act at the time the permit is granted or thereafter shall remain subject to that jurisdiction notwithstanding the placement of any fill or the implementation of any substantial change in use authorized by this amended permit. Any area not subject to the jurisdiction of the San Francisco Bay Conservation and Development Commission that becomes, as a result of any work or project authorized in this amended permit, subject to tidal action shall become subject to the Commission's "bay" jurisdiction.
- I. **Changes to the Commission's Jurisdiction as a Result of Natural Processes.** This amended permit reflects the location of the shoreline of San Francisco Bay when the permit was issued. Over time, erosion, avulsion, accretion, subsidence, relative sea level change, and other factors may change the location of the shoreline, which may, in turn, change the extent of the Commission's regulatory jurisdiction. Therefore, the issuance of this amended permit does not guarantee that the Commission's jurisdiction will not change in the future.

- J. **Violation of Permit May Lead to Permit Revocation.** Except as otherwise noted, violation of any of the terms of this amended permit shall be grounds for revocation. The Commission may revoke any permit for such violation after a public hearing held on reasonable notice to the permittee(s) or their assignees if the amended permit has been effectively assigned. If the permit is revoked, the Commission may determine, if it deems appropriate, that all or part of any fill or structure placed pursuant to this amended permit shall be removed by the permittee(s) or their assignees if the permit has been assigned.
- K. **Should Permit Conditions Be Found to be Illegal or Unenforceable.** Unless the Commission directs otherwise, this amended permit shall become null and void if any term, standard condition, or special condition of this permit shall be found illegal or unenforceable through the application of statute, administrative ruling, or court determination. If this permit becomes null and void, any fill or structures placed in reliance on this amended permit shall be subject to removal by the permittee(s) or their assignees if the permit has been assigned to the extent that the Commission determines that such removal is appropriate. Any uses authorized shall be terminated to the extent that the Commission determines that such uses should be terminated.
- L. **Permission to Conduct Site Visit.** The permittee(s) shall grant permission to any member of the Commission's staff to conduct a site visit at the subject property during and after construction to verify that the project is being and has been constructed in compliance with the authorization and conditions contained herein. Site visits may occur during business hours without prior notice and after business hours with 24-hour notice.
- M. **Abandonment.** If, at any time, the Commission determines that the improvements in the Bay authorized herein have been abandoned for a period of two years or more, or have deteriorated to the point that public health, safety or welfare is adversely affected, the Commission may require that the improvements be removed by the permittee(s), its assignees or successors in interest, or by the owner of the improvements, within 60 days or such other reasonable time as the Commission may direct.
- ~~N. **Best Management Practices**~~
- ~~1. **Debris Removal.** All construction debris shall be removed to an authorized location outside the jurisdiction of the Commission. In the event that any such material is placed in any area within the Commission's jurisdiction, the permittee, its assigns, or successors in interest, or the owner of the improvements, shall remove such material, at their expense, within ten days after they have been notified by the Executive Director of such placement.~~
 - ~~2. **Construction Operations.** All construction operations shall be performed to prevent construction materials from falling, washing or blowing into the Bay. In the event that such material escapes or is placed in an area subject to tidal action of the Bay, the permittee shall immediately retrieve and remove such material at its expense.~~

ON. **In-Kind Repairs and Maintenance.** Any in-kind repair and maintenance work authorized herein shall not result in an enlargement of the authorized structural footprint and shall only involve construction materials approved for use in San Francisco Bay. Work shall occur during periods designated to avoid impacts to fish and wildlife. The permittee(s) shall contact Commission staff to confirm current restricted periods for construction.