CALIFORNIA COASTAL COMMISSION

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Filed:	1/20/15
180 th Day:	7/19/15
Staff:	C. Kenyon-A
Staff Report:	4/03/15
Hearing Date:	4/17/15

STAFF REPORT: REGULAR CALENDAR

Application No.:	1-14-1053
Applicant:	MLRX2, LLC
Agent:	SHN Consulting Engineers & Geologists, Inc.
Location:	1200 Railroad Avenue, Eureka, Humboldt County (APNs 003-072-05 and 003-072-06).
Project Description:	Grade and pave existing containment basins; construct a new concrete-lined settling pond; and modify a stormwater outfall pipe to improve the stormwater treatment system on an industrial site adjacent to Humboldt Bay.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

MLRX2, LLC proposes to upgrade the stormwater treatment system at the Renner Bulk plant by grading and paving three unlined containment basins, constructing a new concrete-lined settling pond, and modifying a stormwater outfall pipe. The Renner Bulk Plant is located adjacent to Humboldt Bay on the City of Eureka's western industrial waterfront and has been used for decades as a bulk petroleum storage facility. The three onsite containment basins were originally

constructed to both provide secondary containment for potential petroleum product spills, and to capture and convey stormwater towards the site's collection pond, filtration system, and outfall pipe to the bay. Since 1997, the basins have not been used to contain petroleum but have been left in place in order to continue to capture and direct stormwater as part of the onsite stormwater management system.

The subject property contains contaminated soils and groundwater as the result of spills of petroleum products associated with its historic industrial use. Stormwater that comes in contact with the unlined containment basins and other unpaved areas of the site can spread this contamination by capturing and transporting contaminated sediments at the surface and by leaching into the subsurface and mobilizing contaminant plumes. The proposed paving of the containment basins would separate stormwater from onsite contamination, stopping ongoing resource degradation. Paving the basins would also improve the functioning of the site's stormwater filtration system. Currently, sediments from the unlined containment basins become entrained in runoff during rain events and clog the system's filters, affecting the ability of the filters to remove hydrocarbons. As a result, regular, intensive maintenance of the stormwater pumping and filtration system is necessary during and after rain events to prevent the system from becoming clogged with sediment and overflowing contaminated stormwater into Humboldt Bay. The proposed project would result in a system that does not rely on ongoing human intervention, remedying an unsustainable maintenance situation. As the proposed project would prevent the contamination of stormwater and reduce the risk of contaminants migrating off site and into Humboldt Bay, staff believes the proposed project, as conditioned, is consistent with Sections 30230 and 30231 of the Coastal Act.

As approving the project would result in wetland fill for a use not permitted by Coastal Act Section 30233 and not approving the project would result in significant adverse impacts to the biological productivity and quality of coastal waters inconsistent with the mandates of Sections 30230 and 30231, staff believes the project presents a true conflict among Coastal Act policies. Staff has considered a number of alternatives to the proposed project and has found none that are feasible, less environmentally damaging, and consistent with all relevant Chapter 3 policies. Staff believes the impacts on coastal resources from not constructing the project would be more significant than the project's wetland fill impacts and therefore recommends **approval** of the project pursuant to Section 30007.5 of the Coastal Act with the attachment of the special conditions discussed herein.

The motion to conditionally approve the modified development is found on page 4.

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- Exhibit 1 Regional Location Map
- Exhibit 2 Vicinity Maps
- Exhibit 3 Parcel Map
- Exhibit 4 Site Photographs
- Exhibit 5 Plans for Proposed Grading and Paving of Upland Parcel
- Exhibit 6 Plans for Proposed Outfall Pipe Work
- Exhibit 7 Historic Aerial Photograph (1940s)
- Exhibit 8 Historic Site Map (1973)
- Exhibit 9 Current Stormwater Management System
- Exhibit 10 Site Plan Showing Stormwater Overflow Pathway
- Exhibit 11 Map of Bunker C Contamination Plumes
- Exhibit 12 NMFS Concurrence Letter

I. MOTION AND RESOLUTION

Motion:

I move that the Commission **approve** *Coastal Development Permit Application No. 1-14-1053 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves coastal development permit 1-14-1053 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 of 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. U.S. Army Corps of Engineers Approval. PRIOR TO COMMENCEMENT OF CONSTRUCTION, the Permittee shall provide to the Executive Director a copy of a permit, permit amendment, or letter of permission issued by the Army Corps of Engineers, or evidence that no permit or permission is required. The Permittee shall inform the Executive Director of any changes to the project required by the Army Corps of Engineers. Such changes shall not be incorporated into the project until the Permittee obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.
- 2. Construction Responsibilities. The Permittee shall comply with the best management practices listed in the Permittee's Stormwater Improvement and Tide Gate Project Description dated May 8, 2014, except as modified or supplemented herein. Construction-related requirements shall include, but shall not be limited to, the following Best Management Practices:
 - A. Construction activities shall be conducted during the dry season period of April 15th through October 15th.
 - B. If rainfall is forecasted during the time construction activities are being performed, all on-site stockpiles of soil and construction debris shall be covered and secured before the onset of precipitation. All work shall cease upon the onset of precipitation at the project site.
 - C. Construction equipment and materials shall be staged away from coastal waters on the relatively flat compacted gravel area immediately west of former Tank Farm 2 and north of former Tank Farm 3. Stormwater runoff and erosion control barriers shall be installed between the designated staging area and Humboldt Bay.
 - D. No excavated soil or construction debris shall be temporarily placed or stored where it may be subject to entering waters of Humboldt Bay. All on-site stockpiles of soil and construction debris shall be contained at all times to minimize discharge of sediment and other pollutants.
 - E. During construction, all trash shall be removed from the work site and disposed of on a regular basis to avoid contamination of habitat. Any and all debris resulting from construction activities shall be removed from the project site and disposed of at an authorized disposal location within 10 days of project completion and/or prior to the onset of the rainy season, whichever is earlier.
 - F. All excavated soils shall remain onsite and be incorporated as fill pursuant to and consistent with the terms and conditions of this permit (CDP 1-14-1053); or disposed of at an authorized disposal site capable of receiving such fill materials.

- G. Concrete paving and grinding operations, and storm drain inlet protection best management practices shall be employed to prevent concrete grindings, cutting slurry, and paving rinsate from entering drop inlets or sheet-flowing into coastal waters.
- H. Fuels, lubricants, and solvents shall not be allowed to enter waters of Humboldt Bay. All equipment used during construction shall be free of oil and fuel leaks at all times. Any fueling, maintenance, concrete washout, and washing of construction equipment shall occur within the fenced Renner Bulk Plant facility, more than 100 feet away from the mean high tide line, where any runoff would be directed to the existing containment basins rather than toward Humboldt Bay.
- I. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site, and a registered first-response, professional hazardous materials clean-up/remediation service shall be locally available on call. Any accidental spill shall be rapidly contained and cleaned up.
- J. Prior to the commencement of work on the tidelands parcel, the work area shall be delineated, limiting the potential area affected by construction, and workers shall be educated about the limitations on construction. All vehicles and equipment shall be restricted to pre-established work areas and established or designated access routes.
- K. A clear water diversion (cofferdam) shall be installed to enclose the outfall pipe construction area and minimize the transport of sediment and concrete pollution to Humboldt Bay.
- L. Any construction activities occurring in the intertidal zone shall occur during an outgoing low tides.
- M. No work shall occur in areas containing eelgrass (*Zostera marina*) or North Coast Salt Marsh without a Commission amendment to this coastal development permit unless the Executive Director determines no amendment is legally required.
- **3. Protection of Bird Nesting Habitat.** No more than 14 days prior to the commencement of construction, a survey for nesting birds in and adjacent to the project area shall be conducted by a qualified biologist, unless the project will occur outside of the avian breeding/nesting season (between February 1 and August 31). If any active nesting habitat is identified during preconstruction surveys within 300 feet of the limits of work, construction shall be delayed until after the young have fledged, as determined during surveys by a qualified biologist.

4. Protection of Archaeological Resources.

- A. If an area of historic or prehistoric cultural resources or human remains are discovered during the course of the project, all construction shall cease and shall not recommence except as provided in subsection (b) hereof, and a qualified archaeological resource specialist shall analyze the significance of the find.
- B. A Permittee seeking to recommence construction following discovery of the archeological deposits shall submit an archaeological plan for the review and approval of the Executive Director, prepared in consultation with the Tribal Historic

Preservation Officers of the Wiyot Tribe, Blue Lake Rancheria, and Bear River Band of Rohnerville Rancheria.

- (i) If the Executive Director approves the Archaeological Plan and determines that the Archaeological Plan's recommended changes to the proposed development or mitigation measures are de minimis in nature and scope, construction may recommence after this determination is made by the Executive Director.
- (ii) If the Executive Director approves the Archaeological Plan but determines that the changes therein are not de minimis, construction may not recommence until after an amendment to this permit is approved by the Commission.

IV. FINDINGS AND DECLARATIONS

A. Project Description

MLRX2, LLC proposes to grade and pave three unlined containment basins and an adjacent upland area, construct a new concrete-lined settling pond, and install a check valve and headwall on the bay-end of a stormwater outfall pipe at the Renner Bulk Plant at 1200 Railroad Avenue in Eureka, Humboldt County. The purpose of the proposed work is to improve the site's stormwater treatment system to prevent discharges of contaminated stormwater runoff into Humboldt Bay. The proposed modifications to the stormwater containment basins and the stormwater outfall pipe are described separately below.

Grading and Paving of Containment Basins and Installation of New Collection Pond

MLRX2, LLC proposes to grade and pave three existing containment basins encompassing a total area of approximately 2 acres, and construct one new concrete-lined pond for continued stormwater collection. The applicant would line the sides and bottoms of the three existing containment basins with a total of approximately 3,600 cubic yards of earthen fill, including 1,400 cubic yards of imported fill, and 2,200 cubic yards that would be excavated from a relatively flat area at the northwest corner of the site (Exhibit 5, pg. 1). This excavation area is currently used as a turnaround for storage and staging of equipment. Once graded, the excavation area and containment basins would be paved. Both the excavation area and the three filled containment basins would be designed to drain into the proposed new concrete-lined pond through a series of drainage inlets and pipes (see Exhibit 5, pg. 2 for a grading plan).

The new concrete-lined pond would be constructed in the location of an existing sump pump and collection pond on the western side of one of the containment basins. The new pond would be sized to hold 9,100 cubic feet of runoff with one foot of free board, the estimated volume of runoff from an eighty-fifth percentile storm event. Stormwater that collects in the pond would be pumped through the existing on-site stormwater filtration system out to the bay as it is currently. The proposed system modifications would result in less sediment becoming entrained in stormwater before entering the filtration system, but would not affect the design discharge rate or the quality of water being discharged from the site.

Construction equipment would be brought to the project site through the existing facility entrance on Railroad Avenue and would access the containment basins from existing paved and gravel access routes on site. All excavated soils would remain on site and be incorporated as fill.

Modifications to Stormwater Outfall Pipe

As part of the project, MLRX2, LLC also proposes to improve the stormwater outfall pipe that drains the entirety of the site into Humboldt Bay. After on-site stormwater is treated, it is pumped through a drop inlet into a concrete skim box where it then gravity flows through an approximately 8-inch diameter outfall pipe across the western end of the site and into the bay. The outfall pipe used to discharge stormwater from the concrete skim box has a top elevation of 5.3 feet. The bay-end of the outfall pipe is buried in the mud within the intertidal zone and its exact location and condition are unknown.

Potholing is the practice of locating underground utilities using vacuum excavation or a backhoe. MLRX2, LLC proposes to first attempt to locate the stormwater outfall pipe by potholing in a 424-square-foot upland area between an existing access road and rip rap on the eastern side of the tidelands parcel. Potholing would be conducted using a backhoe or excavator and hand tools. If the outfall pipe can be located from this upland area, less potholing would be necessary in the intertidal zone. Potholing within the intertidal zone would occur during an outgoing low tide in an approximately 650-square-foot (0.015 acre) work area (See Exhibit 6, pgs. 1, 3). Once the end of the pipe is exposed, MLRX2, LLC proposes to construct a two-foot by three-foot concrete headwall and either maintain the existing check valve on the pipe end or install a new check valve if one is not present (See Exhibit 6, pg. 2). The installation of a headwall would result in six square feet of permanent fill. A cofferdam would be used in the intertidal zone during construction to prevent the transport of sediment, concrete, or other construction debris to the bay.

The maximum amount of excavation that may be necessary to locate the end of the outfall pipe is estimated to be approximately 80 cubic yards. Most of the material excavated during potholing would be set aside and replaced upon completion of work. Approximately one cubic yard of excavated material would require disposal offsite at an approved upland location.

Construction equipment and materials related to the outfall pipe work would be brought from Railroad Avenue through the Renner Bulk Plant facility and staged on the relatively flat gravel area located in the northwest corner of the property over 100 feet upland from the mean high tide line. From the staging area, equipment and materials would be moved to the outfall pipe work areas through a gate in the chain link fence at the western edge of the facility and across existing access roads and an existing paved boat ramp (See Exhibit 6, pgs. 1, 4-5).

B. BACKGROUND & ENVIRONMENTAL SETTING

The Renner Bulk Plant is located adjacent to Humboldt Bay, approximately one-half mile west of Highway 101 on the City's western industrial waterfront. The facility is surrounded to the north by a log deck and dock, to the south by a chip export facility, to the east by a lumber yard and mill, and to the west by Humboldt Bay (Exhibits 1-2).

The proposed grading and paving work is located on a 4.7-acre parcel owned by the applicant (APN 003-072-006), while the proposed outfall pipe work is located on an adjacent 2.6-acre tidelands parcel owned by the City of Eureka (APN 003-072-005) (See <u>Exhibit 3</u> for a parcel map). Both parcels are zoned MC-Coastal Dependent Industrial. The parcel owned by the

applicant ranges in elevation from approximately 10 to 15 feet above mean sea level and is covered with a layer of clay, silt, and sand fill ranging in depth from four to twelve feet. The tidelands parcel consists of (from west to east) mudflat and eelgrass habitat, an unvegetated gravel beach, a narrow band of rip-rap with patchy ruderal vegetation, and an asphalt road (See **Exhibit 4**, **pg. 2** for photographs of the tidelands parcel). SHN Consulting Engineers and Geologists, Inc (SHN) conducted a Natural Resource Assessment of both parcels including botanical surveys on January 9, February 11, and June 27, 2014. According to their assessment, the two parcels contain no rare plants and a number of invasive species include pampas grass, Scotch broom (*Cytisus scopar*), and Himalaya blackberry (*Rubus armenicus*).

History of the Site

From the 1930s through February 1996, Unocal Products Corporation (Unocal) owned and operated a bulk fuel terminal on the subject site. While the terminal was operational, petroleum products were received by way of rail and tanker ships and transferred through underground piping from the rail spur and wharf to above ground storage tanks. At the height of operations, the site contained eight large aboveground fuel storage tanks with a total storage capacity of over 1,250,000 gallons, and ten smaller aboveground storage tanks with a 25,000 gallon capacity. The eight larger steel tanks stored diesel fuel and unleaded and leaded gasoline, and were contained within three containment basins, designated as Tank Farms 1, 2, and 3. Tank Farm 1, the oldest containment area, is an approximately 0.7-acre basin at the northeast corner of the facility surrounded by a concrete berm. Tank Farm 1 historically contained six of the eight large fuel storage tanks. Tank Farms 2 and 3 are similarly sized basins that are surrounded by earthen berms and historically contained one large storage tank each. Tank Farm 2 is located directly west of Tank Farm 1, and Tank Farm 3 is located in the southwest corner of the parcel. Tank Farm 2 was constructed between 1941 and 1948, while Tank Farm 3 was constructed in 1979, both on areas of the property that were formerly part of Humboldt Bay (See Exhibit 7 for an aerial photograph of the site in the 1940s prior to the installation of Tank Farms 2 and 3, and **Exhibit 8** for a map of the site in 1973 prior to the installation of Tank Farm 3). The ten smaller aboveground storage tanks are located in the central portion of the site.

Tosco Distribution Company (Tosco) purchased the facility in 1997, at which time the eight large storage tanks were decommissioned and left in place. The site changed ownership again in 2005, and in 2006 CBE, LLC, the new owner, had the eight tanks demolished and removed from the tank farm containment basins. Under CBE, LLC and now MLRX2, LLC,¹ L & M Renner, Inc. operates a small bulk tank facility on the site. The bulk plant receives deliveries of petroleum products such as lubricating oils, red diesel, kerosene, and waste oil, and stores the products for later distribution to retail and private customers. The fuels and some of the lubrication and hydraulic oils are delivered by tanker trucks and stored at the facility in the ten remaining smaller aboveground storage tanks, while other products such as grease, oil, and solvents are delivered in 55-gallon drums and smaller containers and are stored in the warehouse. Most of the bulk plant operations occur on the southern half of the site east of Tank Farm 3 where the ten remaining smaller storage tanks, a warehouse/office building, and a maintenance garage/storage building are located (See Exhibit 9 for a site plan that shows current site features). The southeastern portion of the site also contains over 500 trees planted beginning in

¹ MLRX2,LCC was founded in 2008 and is privately held by Michael Renner.

2007 for the purpose of phytoremediation of historical soil and groundwater contamination (See **Exhibit 5**, **pg. 1** for an aerial photograph that labels the location of the phytoremediation areas).

The remainder of the site is not currently in industrial use, including a boat ramp and dock on the tidelands parcel and Tank Farms 1, 2, and 3. When the eight large fuel storage tanks were removed in 2006, most of the concrete and earthen containment berms of Tank Farms 1, 2, and 3 were left in place in order to continue to capture and direct stormwater, as described below. According to the natural resources assessment report prepared for the project (SHN, 2014), areas within the tank farm containment basins regularly pond and support patchy emergent vegetation including a dominance of sea side plantain (*Plantago maritima*), brass buttons (*Cotula coronopifolia*), three-square bullrush (*Schoenoplectus americanus*), and sickle grass (*Parapholis incurva*). Due to their observed hydrology and hydrophytic vegetation, the tank farm containment basins are presumed to be wetlands under the Coastal Act (See Exhibit 4, pg. 1 for current photographs of the basins).

Stormwater System

The tank farm containment basins were constructed not only for the purposes of secondary containment of potential petroleum-product spills, but also for stormwater management. The site was designed so that all stormwater contacting industrial areas drains into the three containment basins, which in turn direct the water through catch basins, trench drains, and culverts to a collection pond located on the western end of Tank Farm 2 that acts as a pretreatment settling basin. Originally stormwater from the collection pond was only pumped through an oil skim box to remove separate phase (floating) hydrocarbons before flowing through an outflow pipe into Humboldt Bay. In 1997, the North Coast Regional Water Quality Control Board (Regional Board) required additional treatment of the stormwater to remove dissolved concentrations of hydrocarbons. Under the new treatment system, stormwater generated within the entire facility still flows to the collection pond in Tank Farm 2, but it is now pumped through a 10-micron bag filter and then through two 1,000-pound granular activated carbon beds before entering into an oil skim box that discharges through an outfall pipe into the bay (See Exhibit 9 for a 2011 site plan illustrating the current stormwater management system). The system is described in the site's Storm Water Pollution Prevention Plan and Stormwater Monitoring Program, both prepared by SHN and last updated in December 1998.

The new system provides better treatment than the old system, but has never worked efficiently. While the old system (the oil/water separator) could process stormwater at a rate of 200 gallons per minute (gpm), the new system is only designed to process water at a rate of 40 gmp and the system is prone to clogging from sediment which further slows the discharge rate. The system contains a number of pretreatment Best Management Practices (BMPs) to reduce clogging of the carbon beds, including a skimmer system on the collection pond that collects water from the upper portion of the pond, allowing sediment to settle, and a rock filter and metal screen between the pond and the 10-micron bag filter and carbon beds. Despite these pretreatment filtration practices, sediment and other debris from the unlined containment basins regularly clog the filter and carbon beds, slowing the processing rate and hindering the carbon filter's ability to remove hydrocarbons.

When the filter and carbon beds become plugged by sediment and debris, the abandoned containment basins begin to flood, which in turn brings more sediment to the collection pond. During the rainy season, regular, intensive maintenance of the stormwater pumping and filtration system is necessary to prevent the system from becoming clogged and causing hydrocarbon-contaminated stormwater to overflow the ponds and discharge directly into Humboldt Bay (See **Exhibit 10** for a site plan showing the pathway of stormwater overflow into the bay).

Soil and Groundwater Contamination

Like many underutilized industrial properties on Eureka's urban waterfront, the subject property contains contaminated soils and groundwater as the result of its historic use. Past environmental investigations conducted under various cleanup and abatement orders issued by the Regional Board have detected petroleum hydrocarbons and Halogenated Volatile Organic Compound (HVOCs) in the soil, and a gasoline plume, multiple diesel plumes, three Bunker C plumes, and an HVOC plume in the groundwater (Cleanup Site Identification #1NHU463). Investigations of the contamination have been ongoing since 1986 and remedial activities have been occurring since 1994. The majority of HVOC contaminated soils have been excavated, and the dissolved plumes of gasoline, diesel, and HVOCs continue to undergo active remediation. No technologically achievable remedy exists to remediate the Bunker C plumes which will remain on site for the foreseeable future (Covenant and Environmental Restriction on Property, Instrument No. 2006-13527-8, recorded May 8, 2006; See Exhibit 11 for map of Bunker C plumes). According to 2014 monitoring results (TRC, August 2014), residual soil and groundwater contamination may exist throughout the site, but is most likely to be encountered in the vicinity of the remaining storage tanks and within the operating bulk plant on the southeastern portion of the site. In addition, neighboring environmental cleanup sites may be contributing new contaminants to the site's groundwater. For example, a former Pacific Gas and Electric fuel pipeline located within 200 feet of the site may be a continuing source of Bunker-C fuel oil contamination. For additional information on site contamination, monitoring, and remediation, see Appendix B.

The unlined containment basins, and other uncapped areas of the site, expose surface-water runoff to contamination in soils and groundwater, potentially resulting in the spread of contamination. This spread of contamination is currently mitigated by the site's stormwater management system, which contains and treats all surface-water runoff before it is discharged to Humboldt Bay. However, in the event of a failure of the site's stormwater treatment system due to clogging filters, contaminated stormwater could be discharged directly to the bay.

C. STANDARD OF REVIEW

The proposed project area is bisected by the boundary between the retained CDP jurisdiction of the Commission and the CDP jurisdiction delegated to the City of Eureka by the Commission through the City's certified local coastal program (LCP). The work within the City's CDP jurisdiction includes the filling, grading, and paving of the containment basins and construction of the new concrete-lined pond. The work within the Coastal Commission's jurisdiction consists of the modifications to the stormwater outfall pipe.

Section 30601.3 of the Coastal Act authorizes the Commission to process a consolidated coastal development permit application when requested by the local government and the applicant and

approved by the Executive Director for projects that would otherwise require coastal development permits from both the Commission and from a local government with a certified LCP. In this case, the applicant requested a consolidated permit process, and the City of Eureka's Community Development Director consented on behalf of the City Council in a letter dated October 9, 2013. The Executive Director also agreed to the consolidated permit processing request.

The policies of Chapter 3 of the Coastal Act provide the legal standard of review for a consolidated coastal development permit application submitted pursuant to Section 30601.3. The local government's certified LCP may be used as guidance.

D. OTHER AGENCY APPROVALS

City of Eureka

As described above, the City of Eureka and the applicant have requested and the Executive Director has agreed to a consolidated permitting process. In addition, the City has granted permission and approval for the proposed outfall modification work on the City's property (APN 003-072-005). The City requires no other discretionary permits for this project.

Humboldt Bay Harbor, Recreation, and Conservation District (Harbor District)

The Harbor District is a county-wide agency with permit jurisdiction over all the tidelands and submerged lands of Humboldt Bay. On October 23, 2014, the Harbor District issued Permit No. 14-06 for the replacement and reconstruction of the stormwater system on Humboldt Bay waters and adjacent lands on APNs 003-072-005 and 003-072-006. The Harbor District is also acting as CEQA lead agency and filed a Notice of Exemption for the project as a whole on October 18, 2014.

U.S. Army Corps of Engineers (Army Corps)

The Army Corps has regulatory authority over the outfall pipe portion of the proposed project under Section 404 of the Clean Water Act which regulates the fill or discharge of materials into waters of the United States. An application for the outfall modification portion of the project was submitted to the Army Corps on June 27, 2014 and the permit is pending. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission attaches **Special Condition 1**, which requires the applicant, prior to commencement of development, to demonstrate that all necessary approvals from the Corps for the proposed project have been obtained. The condition also requires that any project changes resulting from the Army Corps' approval not be incorporated into the project until the applicant obtains any necessary amendments to this coastal development permit.

The Army Corps has determined that the site's containment basins are not waters of the United States and therefore the Army Corps is not requiring a 404 permit for the proposed grading of the basins. The Army Corps is not taking jurisdiction over the basins because (1) the basins do not have a direct hydrological connection to the bay; and (2) the basins meet the criteria for waste treatment systems under the Clean Water Act (33 Code of Federal Regulations Part 328.3(a)).

National Marine Fisheries Service

Pursuant to Section 7(a) of the Endangered Species Act of 1973, as amended (U.S.C. Sec 1531 et seq.), the Army Corps initiated consultation with the National Marine Fisheries Service (NMFS) requesting their concurrence that the proposed outfall modification work is not likely to adversely affect listed species. In a letter to the Army Corps dated February 13, 2015, NMFS concurred with the determination that the project was not likely to adversely affect Southern Oregon/Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch*), California Coastal (CC) Chinook salmon (*O. tshawytscha*), Northern California (NC) steelhead (*O. mykiss*), Southern DPS North American green sturgeon (*Acipenser medirostris*) and designated critical habitat for these species (Exhibit 12).

North Coast Regional Water Quality Control Board (Regional Board)

The Regional Board requires a water quality certification (WQC) for projects involving dredging and/or filling activities in Army Corps jurisdictional wetlands under Section 401 of the Clean Water Act. On August 8, 2014, The Regional Board issued a 401 WQC for the outfall pipe modification portion of the project (WDID No. 1B14062WNHU). The containment basins are covered under the site's General Industrial Stormwater Permit and described in the site's Stormwater Pollution Prevention Plan. The proposed changes to the stormwater system including the grading and paving of the basins will be reviewed and approved by the Regional Board's industrial stormwater coordinator and the Regional Board's case worker associated with the site's Remedial Action Plan.

State Lands Commission

The project site is located in an area subject to the public trust. The tidelands in the project area have been granted to the City of Eureka by legislative grant and therefore no approvals from State Lands Commission are needed for the project.

E. Maintenance & Restoration of Marine Resources

Section 30230 of the Coastal Act states:

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 of the Coastal Act states:

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.

The project site is located adjacent to Humboldt Bay, one of California's largest coastal estuaries, second only to San Francisco Bay in size. The bay serves as habitat for a diverse congregation of invertebrates, fish, birds, and mammals, as well as an important stopover for migratory birds traveling from the Arctic Circle to South America. The proposed project involves stormwater treatment system improvements to prevent discharges of contaminated stormwater into Humboldt Bay. The project includes paving approximately 2.7 acres of the Renner Bulk Plant facility and installing a headwall and check valve on the stormwater system's outfall pipe that discharges to the bay on the adjacent tidelands parcel.

Decades of use as a bulk petroleum storage facility has resulted in soil and groundwater contamination at the Renner Bulk Plant, as described in <u>Finding IV-B</u> above and in <u>Appendix B</u>. When stormwater contacts the unlined containment basins, the stormwater is exposed to contaminants in the soil as well as contaminants in the underlying groundwater through infiltration into the ground or groundwater-to-surface water migration. Water quality samples collected twice a year as part of the applicant's ongoing monitoring and reporting requirements through the Regional Board's industrial stormwater program show that stormwater is becoming contaminated by onsite pollution before being filtered and discharged to the bay. According to the most recent water quality data from May 9, 2014, pre-filtration water quality samples test positive for 79 micrograms per liter of total petroleum hydrocarbon as diesel (TPHD) and 12 milligrams per liter of total organic carbon. The proposed paving of the three containment basins and an adjacent unpaved portion of the facility will resolve this ongoing resource degradation by creating a closed stormwater system in which onsite stormwater will be captured and conveyed to the filtration system without contacting hydrocarbon-contaminated soil and groundwater.

Stormwater that comes in contact with the unlined containment basins and other unpaved areas of the site can spread onsite contamination by capturing and transporting contaminated sediments at the surface and by leaching into the subsurface and mobilizing contaminant plumes. Currently the spread of contaminants from the surface of the site into the bay is designed to be stopped by the onsite carbon filtration system. According to a recent review of the site's remedial action plan (TRC, 2013), continuing low concentrations of contaminants in wells situated between the source area and the Bay indicate that Humboldt Bay is not currently impacted by the site's groundwater contamination. However, the local groundwater gradient is oriented towards Humboldt Bay, and thus there is a threat of contaminant plumes migrating towards the bay.

The proposed paving of the containment basins and adjacent upland turnaround area will result in the entire Renner Bulk Plant facility being covered with impervious surface, except for individual bored holes approximately one foot in diameter where over 500 willow, alder, and cottonwood trees have been planted for the purpose of phytoremediation. The impervious surface will act as a cap, sealing off contaminants from the aboveground environment and reducing underground migration of pollutants away from the site. By isolating the contamination, the cap will also prevent people and wildlife from coming into contact with hazardous materials and potentially tracking contaminants offsite. Current active remediation at the site includes ongoing phytoremediation as well as weekly removal of separate phase hydrocarbon from select monitoring and extraction wells. The proposed cap will control access to the plume areas and prevent exposure during this active remediation.

Paving the site will also improve the functioning of the stormwater filtration system and help prevent accidental discharges of untreated stormwater to the bay. Currently, sediments from the unlined containment basins of the former bulk terminal become entrained in runoff during rain events and clog the system's filters, affecting the ability of the filters to remove hydrocarbons. In addition, once the filtration system becomes plugged with sediment, the water levels in the unlined containment basins begin to rise, which in turn brings more sediment to the pumping area. As a result, regular, intensive maintenance of the stormwater pumping and filtration system is necessary during and after rain events to prevent the system from becoming clogged with sediment and causing hydrocarbon contaminated stormwater runoff to back up at the filter, overflow the containment basins, and discharge into Humboldt Bay. During periods of high rainfall, sediment filters must be changed out every few hours and even cleaned filters still cannot keep up with the rainfall. On average, the sediment filters must be replaced 87 times per year and the carbon filters must be replaced once, resulting in close to \$50,000 in annual stormwater system maintenance costs.

The release of hydrocarbon-contaminated stormwater into Humboldt Bay as the result of the system becoming clogged with sediments has happened before on at least one occasion. According to bulk plant staff, during a storm event approximately ten years ago, the stormwater filtration system became clogged with sediment and overflowed, releasing hydrocarboncontaminated stormwater to Humboldt Bay. Exhibit 10 is a markup of a 2003 site plan showing the overflow pathway to the bay. When the containment basins flood, the backed-up stormwater ends up overflowing out of the southeast corner of the site into the adjacent storm drain diversion structure, from which it flows into an underground 30-inch drainage pipe that discharges to Humboldt Bay without any filtration. Discharges of contaminated runoff could harm the diverse biota occupying the bay, including at least 300 fish and invertebrate species, many with important commercial and recreational fisheries value, over 100 species of birds (that regularly frequent the various wetland habitats associated with the bay), and over 30 species of mammals (in and around the bay). In addition, numerous rare, threatened, and endangered species inhabit the bay and its associated habitats that could be affected by contaminated runoff, including tidewater goby (Eucyclogobius newberryi), Chinook salmon (Oncorhynchus tshawytscha), coho salmon (O. kisutch), steelhead trout (O. mykiss irideus) coastal cutthroat trout (O. clarkii clarkii), green sturgeon (Acipenser medirostris), eulachon (Thaleichthys pacificus), long-fin smelt (Spirinchus thaleichthys), double-crested cormorant (Phalacrocorax auritus), osprey (Pandion haliaetus), several rare salt marsh plant species (e.g., Humboldt Bay owl's clover, Castilleja ambigua ssp. humboldtiensis and Point Reyes' bird's-beak, Cordylanthus maritimus ssp. palustris), and various other species. Furthermore, beds of eelgrass (Zostera marina) are present immediately off-shore from the subject site that function as important shelter, foraging, and in some cases spawning habitats for a variety of fish species. The discharges could also affect kayakers and other recreational boaters who may come in contact with bay waters in the vicinity of the project site.

Multiple factors could combine to cause the system to overflow again in the future. If a power outage occurs during a substantial, sustained storm or series of large storms, the system could

become clogged with sediments and the pumps could stop working. If such an event were to occur during the night or on a weekend, response staff might not be able to be reached in time, especially if there is a power outage. In contrast, the proposed project will result in a system that does not rely on ongoing human intervention to remedy an unsustainable maintenance situation and thus will greatly reduce the threat of discharges of contaminated stormwater to the bay. The proposed paving of the basins and turnaround area will (1) reduce the entrainment of sediment in the stormwater runoff that can clog the filtration system, and (2) eliminate the exposure of runoff to contaminants and thus reduce the need for filtration in the first place. The Regional Board staff concurs that grading and paving the containment basins is protective of water quality as it will both reduce the sediment load for the stormwater treatment system and direct runoff away from contaminated areas onsite.

In addition to modifications to the containment basins, MLRX2, LLC proposes to make improvements to the stormwater outfall pipe on the tidelands parcel, including the installation of a check valve on the bay end of the outfall pipe to prevent any inflow of water from Humboldt Bay into the stormwater treatment system. Without a functioning valve or tide gate, water from Humboldt Bay enters the outfall pipe during high tides, preventing the flow of stormwater out to the bay and thus causing the system to back up. The modifications to the outfall will allow the stormwater system to drain efficiently, further reducing the threat of contaminated stormwater overflowing into Humboldt Bay.

Despite the proposed project's water quality benefits, the construction necessary to implement the project could potentially result in excavated sediments, construction debris, or hazardous materials entering Humboldt Bay and negatively impacting water quality and aquatic habitat. To ensure that project construction will not adversely affect the biological productivity and quality of coastal waters consistent with Sections 30230 and 30231 of the Coastal Act, the Commission attaches **Special Condition 2** requiring the applicant to undertake development pursuant to certain construction responsibilities. To avoid runoff and erosion caused by rain, this special condition includes requirements that the applicant limit the construction window to the dry season (April 15th – October 15th), cover and secure all stockpiled material if rainfall is forecasted, and cease work upon the onset of precipitation. To further prevent and contain erosion and run-off, Special Condition 2 also requires that the applicant (1) stage construction equipment and materials away from coastal waters in the designated staging area (the turnaround area on the upland parcel); (2) install stormwater runoff and erosion control barriers between the designated staging area and Humboldt Bay; (3) temporarily place or store excavated soil and construction debris only in areas where it will not be susceptible to entering waters of Humboldt Bay; (4) contain all on-site stockpiles of soil and construction debris at all times; (4) remove all trash from the work site and dispose of it on a regular basis; and (5) remove all debris resulting from construction activities within 10 days of project completion and/ or prior to the onset of the rainy season, whichever is earlier. Furthermore, to ensure proper disposal of excavated soils and other construction waste, Special Condition 2 requires that any and all debris resulting from construction activities be disposed of at an authorized disposal location, and all excavated soils remain onsite and be incorporated as fill pursuant to and consistent with the terms and conditions of this permit (CDP 1-14-1053) or disposed of at an authorized disposal site capable of receiving such fill materials. Finally, to prevent and control accidental spills, Special Condition 2 requires the applicant to (1) employ best management practices related to concrete paying and grinding

operations and storm drain inlet protection; (2) only use equipment that is free of oil and fuel leaks at all time; (3) conduct any fueling, maintenance, concrete washout, or washing of construction equipment more than 100 feet away from the mean high tide line; and (4) keep hazardous materials management equipment including oil containment booms and absorbent pads available immediately on-hand at the project site, and (5) keep a registered first-response, professional hazardous materials clean-up/remediation service locally available on call. The applicant has also proposed a number of best management practices specific to work in the intertidal zone that are included as **Special Condition** <u>2(K-L)</u>. These best management practices include conducting work during outgoing low tides to avoid working within the water, and installing a cofferdam around the perimeter of the work area to control and minimize sediment and concrete pollution transport to Humboldt Bay.

The tidelands parcel where the outfall pipe work is proposed contains salt marsh habitat in the form of a narrow (approximately two-to-three-foot) band of patchy pickleweed (Sarcocornia pacifica) and Chilean cordgrass (Spartina densiflora) along the upper (east) edge of the rip rap and observed high tide line, as well as eelgrass (Zostera marina) beds concentrated along the western edge of the shoreline continuing towards open waters of the bay (See Exhibit 6). Salt marsh habitat is essential to the health and productivity of the Humboldt Bay ecosystem as it contributes nutrients to the estuarine ecosystem, provides important habitat for wildlife, filters out pollutants, and buffers adjacent lands from flood tides and storms. Eelgrass is also essential to the health and productivity of the bay as it provides many ecological benefits, including stabilization of bottom sediments, a substrate for epiphytic algae and invertebrates, foraging areas and shelter for young fish and invertebrates, food for migratory waterfowl, and spawning surfaces for invertebrates and fish. The upland area where potholing will first be attempted is above the elevation at which both the eelgrass and salt marsh vegetation occur, and, based on the predicted location of the bay-end of the stormwater outfall pipe, the proposed intertidal area of disturbance associated with the installation of the headwall and check valve on the outfall pipe is located above the elevation at which eelgrass occurs and below the elevation at which salt marsh vegetation occurs. In addition, it is expected that by accessing the intertidal work area by the existing concrete boat ramp to the south, impacts to both salt marsh and eelgrass will be avoided entirely during construction. To ensure that areas containing eelgrass and salt marsh are avoided, Special Condition 2(J) requires that the proposed work area be delineated in the field prior to the commencement of construction and that workers be educated about the limitations of construction. Special Condition 2(J) also restricts all vehicles and equipment to pre-established work areas and established or designated access routes. If eelgrass and salt marsh cannot be avoided as anticipated, Special Condition 2(M) requires that no work occur in these habitats without a Commission amendment to this coastal development permit unless the Executive Director determines no amendment is legally required.

As described above, the waters of Humboldt Bay provide habitat for over 100 fish species, including a variety of commercially significant and environmentally sensitive species that could be impacted by the proposed construction work. On February 13, 2015, NMFS issued a concurrence letter (Exhibit 12) to the Army Corps for the Army Corps' review of the associated Section 404 permit for the outfall pipe portion of the subject project. The letter outlined the work's potential effects on marine species listed under the federal Endangered Species Act and "Essential Fish Habitat" (EFH) under the Magnuson-Stevens Fishery and Conservation Act. The

proposed potholing and cofferdam installation and removal are expected to mobilize sediment leading to a temporary increase in turbidity within 300 meters of the project area, and the proposed cofferdam is expected to result in a temporary loss of habitat area behind the structure during construction work. However, due to the action occurring during low tides, the small spatial extent of the project (0.015 acres), the temporary nature of impacts to habitat (up to five days of work), and the abundance of available critical habitat within Humboldt Bay outside the project area, NMFS concluded that the project is not likely to adversely affect federally listed coho salmon, Chinook salmon, steelhead, and green sturgeon or their critical habitat.

Therefore the Commission finds that the development, as conditioned, will maintain optimum populations of marine organisms and protect human health consistent with the requirements of Sections 30230 and 30231 of the Coastal Act.

F. FILL OF WETLANDS

Section 30233(a) of the Coastal Act states, in part:

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:

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.
- (2) Maintaining existing, or restoring previously dredged depths on existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.
- (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.
- (4) Incidental public service purposes, including but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.
- (5) *Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (6) *Restoration purposes.*
- (7) *Nature study, aquaculture, or similar resource dependent activities.*

Coastal Act Section 30108.2 defines "fill" as "earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area." As previously discussed, the three tank farm containment basins pool water and support emergent vegetation and are therefore presumed to be wetlands. The proposed grading of the basins will involve 3,600 cubic yards of wetland fill over approximately two acres (31,083 square feet) of

the subject property. In addition, the proposed stormwater outfall pipe modifications will require work in a 650-square-foot area of the intertidal zone, including the excavation (dredging) of up to 40 cubic yards of sediment and the installation of a two-foot-by-three-foot concrete headwall resulting in a total of six square feet of permanent fill.

The Commission may authorize a project that includes filling of wetlands if the project meets the three tests of Coastal Act Section 30233. The first test requires that the proposed activity fit within one of seven use categories described in Coastal Act Section 30233(a)(1)-(7). The second test requires that no feasible less environmentally damaging alternative exists. The third and final test mandates that feasible mitigation measures are provided to minimize any of the project's adverse environmental effects.

Allowable Use

The first test for a proposed project involving fill is whether the fill is for one of the eight allowable uses under Section 30233(a). The proposed project involves the grading and paving of three unlined stormwater containment basins at the Renner Bulk Plant and the construction of stormwater outfall pipe improvements on the adjacent tidelands parcel. Section 30233(a)(1) allows wetland fill for new or expanded energy and coastal-dependent industrial facilities. The subject properties are zoned for coastal-dependent industrial use, but the boat ramp and dock on the tidelands parcel are currently unused, and industrial activities on the adjacent uplands parcel are not currently coastal-dependent. While petroleum products were historically delivered to the site by tanker ship, they are now delivered by truck and thus the bulk fuel terminal no longer requires a site on or adjacent to the sea to function. The proposed stormwater system improvements prepare the site for possible expanded industrial use in the future, but no new or expanded use is proposed at this time. Thus, as the project does not involve new or expanded energy or coastal-dependent industrial facilities, the proposed filling and dredging does not qualify under Section 30233(a)(1) as allowable filling and dredging for new or expanded energy and coastal-dependent industrial facilities.

The primary purpose of the proposed project is to reduce the mobilization and spread of onsite contamination and improve the efficiency and reliability of the site's stormwater system in order to protect the natural resources and water quality of Humboldt Bay. However, improvement of a privately owned stormwater treatment system is not one of the uses specifically allowed for dredging, diking, and filling of wetlands pursuant to Section 30233(a) of the Coastal Act.

Therefore, the Commission finds that the proposed project is not for one of the allowable uses for dredging, diking, and filling of wetlands, inconsistent with Section 30233(a) of the Coastal Act.

G. Conflict Resolution Between Wetland Fill and Marine Resource Policies of the Coastal Act

As noted above, the proposed stormwater system improvements involve the filling of approximately 2 acres of seasonal wetlands and six square feet of intertidal wetlands inconsistent with the provisions of Section 30233, which require that wetland fill must be for one of the seven allowable uses under Section 30233(a). However, as also noted above, to not approve the proposed amendment would result in a failure to enhance marine resources and the biological

productivity of coastal wetlands and waters that would be inconsistent with the mandates of Sections 30230 and 30231 of the Coastal Act. Section 30230 mandates that marine resources shall be maintained, enhanced, and, where feasible, restored. Section 30231 mandates that the biological productivity of coastal waters appropriate to maintain optimum populations of marine organisms shall be maintained, and where feasible, restored.

The Identification of a True Conflict is Normally a Condition Precedent to Invoking a Balancing Approach

As is indicated above, the standard of review for the Commission's decision whether to approve a coastal development permit in the Commission's retained jurisdiction is whether the project as proposed is consistent with the Chapter 3 policies of the Coastal Act. In general, a proposal must be consistent with all relevant policies in order to be approved. Put differently, consistency with each individual policy is a necessary condition for approval of a proposal. Thus, if a proposal is inconsistent with one or more policies, it must normally be denied (or conditioned to make it consistent with all relevant policies).

However, the Legislature also recognized that conflicts can occur among those policies (Coastal Act Section 30007.5). It therefore declared that, when the Commission identifies a conflict among the policies in Chapter 3, such conflicts are to be resolved "*in a manner which on balance is the most protective of significant coastal resources* [Coastal Act Sections 30007.5 and 30200(b)]." That approach is generally referred to as the "balancing approach to conflict resolution." Balancing allows the Commission to approve proposals that conflict with one or more Chapter 3 policies, based on a conflict among the Chapter 3 policies as applied to the proposal before the Commission. Thus, the first step in invoking the balancing approach is to identify a conflict among the Chapter 3 policies.

Identification of a Conflict

For the Commission to use the balancing approach to conflict resolution, it must establish that a project presents a substantial conflict between two statutory directives contained in Chapter 3 of the Coastal Act. The fact that a proposed project is consistent with one policy of Chapter 3 and inconsistent with another policy does not necessarily result in a conflict.

In order to identify a conflict, the Commission must find that, although approval of a project would be inconsistent with a Chapter 3 policy, the denial of the project based on that inconsistency would result in coastal zone effects that are inconsistent with some other Chapter 3 policy. In most cases, denial of a proposal will not lead to any coastal zone effects at all. Instead, it will simply maintain the *status quo*. The reason that denial of a project can result in coastal zone effects that are inconsistent with a Chapter 3 policy is that some of the Chapter 3 policies, rather than prohibiting a certain type of development, affirmatively mandate the protection of coastal resources, such as sections 30210 ("*maximum access . . . and recreational opportunities shall be provided . . .*"), 30220 ("*Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses*"), and 30230 ("*Marine resources shall be maintained, enhanced, and where feasible, restored*"). Thus, if there is ongoing degradation of one of these resources, and a proposed project would cause the cessation of that degradation) inconsistent with the applicable policy. Therefore, the only way

that denial of a project can have impacts inconsistent with a Chapter 3 policy, and therefore the only way that a true conflict can exist, is if: (1) the project will stop some ongoing resource degradation and (2) there is a Chapter 3 policy requiring the Commission to protect and/or enhance the resource being degraded.

Similarly, denial of a project is not inconsistent with Chapter 3, and thus does not present a conflict, simply because the project would be less inconsistent with a Chapter 3 policy than some alternative project would be, even if approval of the proposed project would be the only way in which the Commission could prevent the more inconsistent alternative from occurring. For denial of a project to be inconsistent with a Chapter 3 policy, the project must produce tangible, necessary enhancements in resource values over existing conditions, not over the conditions that would be created by a hypothetical alternative. In addition, the project must be fully consistent with the Chapter 3 policy requiring resource enhancement, not simply less inconsistent with that policy than the hypothetical alternative project would be. If the Commission were to interpret the conflict resolution provisions otherwise, then any proposal, no matter how inconsistent with Chapter 3, which offered even the smallest, incremental improvement over a hypothetical alternative project, would necessarily result in a conflict that would justify a balancing approach. The Commission concludes that the conflict resolution provisions were not intended to apply based on an analysis of different potential levels of compliance with individual policies or to balance a proposed project against a hypothetical alternative.

In addition, if a project is inconsistent with at least one Chapter 3 policy, and the essence of that project does not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot "create a conflict" by adding on an essentially independent component that does remedy ongoing resource degradation or enhance some resource. The benefits of a project must be inherent in the essential nature of the project. If the rule were to be otherwise, project proponents could regularly "create conflicts" and then demand balancing of harms and benefits simply by offering unrelated "carrots" in association with otherwise-unapprovable projects. The balancing provisions of the Coastal Act could not have been intended to foster such an artificial and manipulatable process. The balancing provisions were not designed as an invitation to enter into a bartering game in which project proponents offer amenities in exchange for approval of their projects.

Finally, a project does not present a conflict among Chapter 3 policies if there is at least one feasible alternative that would accomplish the essential purpose of the project without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the balancing approach. If there are alternatives available that are consistent with all of the relevant Chapter 3 policies, then the proposed project does not create a true conflict among Chapter 3 policies.

In sum, in order to invoke the balancing approach to conflict resolution, the Commission must conclude all of the following with respect to the proposed project before it: (1) approval of the project would be inconsistent with at least one of the policies listed in Chapter 3; (2) denial of the project would result in coastal zone effects that are inconsistent with at least one other policy listed in Chapter 3, by allowing continuing degradation of a resource the Commission is charged with protecting and/or enhancing; (3) the project results in tangible, necessary resource

enhancement over the current state, rather than an improvement over some hypothetical alternative project; (4) the project is fully consistent with the resource enhancement mandate that requires the sort of benefits that the project provides; (5) the benefits of the project are a function of the very essence of the project, rather than an ancillary component appended to the project description in order to "create a conflict;" and (6) there are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

The Project Presents a Conflict

The proposed development will place fill in wetland habitat for a use not enumerated as one of the seven allowable uses listed under Coastal Act Section 30233(a). However, to not approve the project would result in a failure to maintain and enhance marine resources and the biological productivity of coastal waters that would be inconsistent with the mandates of Sections 30230 and 30231 of the Coastal Act.

The proposed stormwater system improvements will prevent stormwater from contacting hydrocarbon-contaminated soil and groundwater as it currently does, ceasing ongoing resource degradation. In addition to tangibly improving onsite water quality, the proposed project will reduce the ongoing risk of hydrocarbon-contaminated runoff or groundwater entering Humboldt Bay and the resulting impacts to the biological productivity and quality of the estuary and to human health. Furthermore, the project is fully consistent with Section 30230's and 30231's mandates to maintain and restore marine resources and the biological productivity and quality of coastal waters, as discussed in Finding IV-E.

Moreover, the filling of wetlands for the improvement of the stormwater treatment system by grading and paving the containment basins and modifying the outfall pipe is the very essence of the project, not an ancillary amenity offered as a trade-off, that is both inconsistent with certain Chapter 3 policies and yet also provides benefits. The seasonal wetlands that have formed in the containment basins are the direct result of the failure of the stormwater treatment system to function properly. The containment basins are meant to collect and convey stormwater to the filtration system with minimal ponding in order to maximize the storage capacity of the basins. In contrast, the creation of wetland features in the basins is the result of the basins pooling water for sustained periods. Wetlands are typically a benefit to water quality as they absorb pollutants and allow suspended sediment to settle. However in this case, the wetlands result in the spread of onsite contamination to stormwater as evinced by water quality samples taken onsite prior to carbon filtration. In contrast, post-filtration sample results show "non-detect" levels of TPHD and total organic carbon. As the carbon filtration system is necessary for the enhancement of degraded water quality, and the wetlands in the containment basins are the result of the filters habitually clogging, protection of the wetlands is in conflict with the protection of water quality. Finally, as discussed below, there are no alternatives identified that are consistent with all of the relevant Chapter 3 policies.

Therefore, The Commission finds that the proposed project presents a true conflict between Chapter 3 policies of the Coastal Act.

Alternatives Analysis

As noted above, a true conflict among Chapter 3 policies would not exist if there are feasible alternatives available that are consistent with all of the relevant Chapter 3 policies. In addition, the second test of Section 30233 requires that the Commission must find that there is no feasible less environmentally damaging alternative to placing fill in wetlands. Coastal Act Section 30108 defines "feasible" as "...*capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.*" In this case, alternatives that have been identified include: (a) a "no project" alternative; (b) covering or lining the containment basins rather than grading and paving them; (c) installing additional filtration mechanisms in the stormwater system to prevent clogging; (d) removing all soil and groundwater contamination from the site; and (e) improving the wetlands in the containment basins.

a. <u>No project alternative</u>

The "no-project" alternative would maintain the status quo, allowing stormwater runoff to come into contact with and mobilize contaminated soil and groundwater and results in an ongoing risk of contaminated discharge to Humboldt Bay inconsistent with the water quality protection mandates of Sections 30230 and 30231 of the Coastal Act as discussed in Finding IV-E. In contrast, the proposed project would separate stormwater from onsite contamination, precluding any additional petroleum residues from becoming entrained in stormwater and spreading further throughout the site and into the bay. Therefore the "no project" alternative is not a feasible less environmentally damaging alternative that is consistent with all relevant Coastal Act policies.

b. <u>Covering or lining the containment basins</u>

The essential purpose of the project is to modify the stormwater system such that stormwater will no longer contact hydrocarbon-contaminated soils and groundwater and will not become turbid with sediment, thereby greatly improving the efficiency and reliability of stormwater filtration and discharge. Any alternative that would accomplish the essential purpose would have to involve installing a barrier between stormwater and the exposed soils of the containment basins. Conceivable alternatives could include 1) constructing a canopy, roof, or some other type of cover over the containment basins, or 2) lining the basins with pond liner or with filter fabric and rock. Constructing a cover over the basins would still likely involve some filling of wetlands to construct footings, and would effectively remove the wetlands by removing light inputs necessary for wetland vegetation and rain inputs necessary for wetland hydrology. Lining the basins with pond liner or with filter fabric and rock would also be as environmentally damaging to the wetlands as the proposed filling of the wetlands because the hydrology and vegetation would be removed. Thus this alternative would also conflict with 30233 as it would continue to involve filling of wetlands for an impermissible use. Furthermore, it would not be as effective in preventing exposure of stormwater to contaminated soil and groundwater as paving the site. Therefore, the alternative of covering or lining the containment basins is not a feasible less environmentally damaging alternative that is consistent with all relevant Coastal Act policies.

c. Installing additional filtration mechanisms

If suspended solids from the unlined containment basins could be more effectively removed from runoff prior to carbon filtration, the threat of the media filter clogging and contaminated stormwater being discharged to the bay would be greatly reduced. Employing additional pretreatment Best Management Practices (BMPs) to remove suspended solids from stormwater is therefore a potential way to reduce the threat of the filtration system clogging without filling the containment basins. However, employing additional pretreatment BMPs would not eliminate the ongoing exposure of stormwater to onsite soil and groundwater contamination that mobilizes and spreads the contamination in conflict with Sections 30230 and 30231 of the Coastal Act.

The installation of additional filtration mechanisms would also not be a feasible alternative. Runoff from the containment basins already flows into a pretreatment settling basin, and through a rock filter, metal screen, and 10-micron bag filter prior to filtration through the granular-activated carbon beds. Furthermore, runoff from paved portions of the site is already plumbed directly to the concrete sump pump basin to minimize the accumulation of additional sediment. Despite these extensive pretreatment BMPs already in place, the amount of sediment that becomes entrained in stormwater during storm events frequently overwhelms the system. This evidence suggests that a larger array of filters and other pretreatment BMPs would only delay rather than prevent clogging of the stormwater treatment system. Thus, the alternative of installing additional filtration mechanisms instead of grading and paving the containment basins is not a feasible less environmentally damaging alternative that is consistent with all relevant Coastal Act policies.

d. Remediation of all onsite soil and groundwater contamination

If the site had no contamination issues, there would be no need to cap the containment basins to separate runoff from the site's soil and groundwater. The alternative of removing all soil and groundwater contamination from the site was evaluated in the site's Remedial Action Plan (SHN, 2000). According to the Remedial Action Plan, while the onsite gasoline and diesel groundwater plumes can be degraded through biological treatment or physically removed through bailing, the Bunker C plumes are not recoverable. In addition, there are several active environmental cleanup sites on neighboring properties that may be contributing new contaminants to the site's groundwater. For example, a former Pacific Gas and Electric fuel pipeline located within 200 feet of the site may be a continuing source of Bunker-C fuel oil contamination. Given the lack of a solution for the remediation of the Bunker C plumes underlying the site and the potential ongoing contamination of the site by offsite sources, complete remediation is infeasible at this time. Therefore, capping the site by paving the unlined basins is necessary to control access to the plume areas and prevent exposure. In addition, even if it were feasible to remove all the contaminated soil and groundwater, this alternative would require excavating a significant portion off the wetlands onsite and therefore would still conflict with 30233. Thus, complete remediation of onsite contamination is not a feasible less environmentally damaging alternative that is consistent with all relevant Coastal Act policies.

e. <u>Improving onsite wetlands</u>

Properly functioning wetlands can act as a natural stormwater treatment system, removing pollutants and entrained sediment from runoff. The approximately two acres of ponded wetlands in the containment basins or a portion thereof could theoretically be enhanced to improve their filtration function so that the carbon filtration system would no longer be necessary and thus the clogging of the filters by sediment would no longer be an issue. However, as discussed previously, allowing water to pond and infiltrate the ground in onsite wetlands would continue to mobilize and exacerbate existing soil and groundwater pollution and thus would be more environmentally damaging than capping the site and would be inconsistent with Sections 30230 and 30231 of the Coastal Act.

In addition, the subject property is used to store petroleum products and is located in an industrial area in close proximity to several other environmental cleanup sites. Because of the site's use and location, there is the ongoing potential for new hazardous material leaks or spills to occur, or new groundwater plumes to migrate onto the site from neighboring properties. In cases such as this one, it is less environmentally damaging to cap the site in order to contain any future contamination, as recommended in the California Storm Water Best Management Practice Industrial and Commercial Handbook for outdoor liquid container storage.

To support wetlands while preventing the spread of contamination, the applicant could cap the site and then construct wetlands above the cap with uncontaminated materials. However, the environmental benefits of creating wetlands above an impermeable cap would be extremely limited and the feasibility of such an endeavor is questionable. Due to the necessary separation of the wetlands from groundwater, the typical groundwater recharge function would be absent and the system may not be able to receive adequate water input to sustain wetland hydrology or support a predominance of hydrophytic vegetation. Conversely, if wetland vegetation were able to become established, its roots may compromise the integrity of the cap, allowing contamination to return to the surface of the site. Therefore, this alternative is not a feasible less environmentally damaging alternative that is consistent with all relevant Coastal Act policies.

Conclusion

As discussed above, the Commission finds that none of the identified alternatives to the proposed project would be feasible, less environmentally damaging, and consistent with all relevant Chapter 3 policies.

Conflict Resolution

After establishing a conflict among Coastal Act policies, Section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources.

In this case, the Commission finds that the impacts on coastal resources from not constructing the project would be more significant than the project's wetland fill impacts. The installation of the headwall and check valve on the stormwater outfall pipe will only result in direct impacts to approximately six square feet of intertidal habitat on a gravel beach, and will ensure proper

stormwater drainage from the Renner Bulk Plant facility while protecting the natural resources and water quality of Humboldt Bay. The proposed grading and paving of the containment basins will result in up to two acres of fill in seasonal wetlands contaminated by petroleumhydrocarbons and dominated by ruderal vegetation including a dominance of sea side plantain, brass buttons, three-square bullrush, and sickle grass. Grading and paving the basins will seal off contamination from the aboveground environment, reducing the exposure of people and wildlife to toxic substances on site. Furthermore, the wetland features in the basins are the result of the basins pooling water for sustained periods, reducing the water storage capacity of the stormwater management system and thus increasing the threat of contaminated stormwater overflow into Humboldt Bay. Grading and paving the basins will reduce the amount of sediment available to clog the filtration system, reducing the threat of contaminated discharge to the bay and thus providing a lasting benefit to water quality, threatened and endangered species and other marine organisms, and the health of people who come in contact with bay waters while kayaking or using other small watercraft.

The Commission therefore finds that the proposed improvements to the stormwater runoff system to (a) prevent mobilization and exacerbation of additional groundwater and soil contamination and (b) avoid discharges of contaminated runoff into Humboldt Bay which will help maintain and enhance water quality and the biological productivity of Bay waters, maintain optimum populations of all species of marine organisms, and protect human health, would be more protective of coastal resources than the impacts of filling approximately two acres of unlined stormwater containment basins and filling six square feet of intertidal gravel beach for the outfall pipe and the associated loss of wetland habitat.

Mitigation for Wetland Fill Impacts

As stated above, the conflict resolution provisions of the Coastal Act require that the conflict be resolved in a manner that on balance is the most protective of significant coastal resources. To meet this test, in past actions where the Commission has invoked the balancing provisions of the Coastal Act, the Commission has found it necessary to mitigate adverse impacts to the maximum extent feasible. Moreover, Section 30233 of the Coastal Act requires in part that filling, diking, or dredging in coastal waters only be allowed when feasible mitigation measures have been provided to minimize significant adverse environmental impacts.

The proposed amendment could have a number of potential adverse impacts, including: (1) loss of intertidal habitat; (2) loss of seasonal wetlands; (3) construction-related impacts to birds; and (4) construction-related impacts to marine resources and the biological productivity and quality of coastal waters. These potential adverse impacts and their mitigation are discussed in the following sections:

a. Loss of intertidal habitat

The proposed installation of a concrete headwall and other modifications to the bay-end of the stormwater outfall pipe will result in approximately six square feet (0.0001 acres) of permanent fill of intertidal habitat. The tidelands parcel where this fill will occur consists of (from west to east) mudflat and eelgrass habitat, an unvegetated gravel beach, rip rap, a berm, a band of patchy pickleweed and Chilean cordgrass, and an asphalt road. Although the exact location of the bay-end of the outfall pipe is unknown, the pipe end is

expected to be buried in mud under the gravel beach. Water has been observed percolating out of the gravel beach in a location and elevation consistent with where the pipe is expected to end based on the pipe elevation where it leaves the concrete skim box. Given that the area where fill is proposed is unvegetated and already covered with gravel fill, and given that the outfall modifications comprise a tiny amount of fill (0.0001 acres) relative to the thousands of acres of intertidal habitat around Humboldt Bay, the Commission finds that the impact to the gravel beach is not significant. Accordingly, no mitigation is necessary for the loss of intertidal habitat associated with the project.

b. Loss of seasonal wetlands

As described above, the grading and paving of the three containment basins on the upland parcel would result in up to two acres of fill in seasonal wetlands. The basins were originally constructed to both provide secondary containment for potential petroleum product spills, and to capture and convey stormwater towards the site's collection pond, filtration system (which was originally just an oil skim box), and outfall pipe to the bay. This duel function is evident by the fact that several of the main drains and containment areas historically had isolation valves; the valves were meant to be left open during normal operations to convey stormwater off the site, and to be closed during petroleum product spills to prevent spills from entering the collection pond and discharging to the bay.

The petroleum product storage tanks within the basins were decommissioned in 1997 and demolished and removed in 2005. While the basins were no longer necessary for secondary containment of petroleum product spills after 1997, they were left in place in order to continue to capture and direct stormwater as part of the onsite stormwater management system. In 1997, the Regional Board required additional treatment of onsite stormwater and, in 1998, the current stormwater pollution prevention plan (SWPPP) was approved by the Regional Board. The containment basins are described in this SWPPP as part of the site's stormwater management system and are currently permitted under the General Industrial Stormwater Permit. Thus the basins were not only constructed as part of an industrial onsite stormwater management system decades ago, but have been used for that purpose continually and are currently used in that capacity.

The fact that the basins were constructed for the purpose of stormwater containment and have been maintained for that purpose since makes them a relatively unique case. On many of the other currently underutilized industrial sites on the Eureka waterfront, wetlands exist as the result of industrial activities inadvertently creating wet areas followed by a lack of onsite maintenance (e.g. heavy equipment creating large ruts in the pavement that are never fixed and eventually develop wetland hydrology and begin to support wetland vegetation). In contrast, in this case wetland conditions have developed due to the intended purpose of detaining stormwater. The basins were created and are maintained for stormwater management, and the wetlands are a direct result of that intended function.

As discussed above, the basins were designed so that collected water would drain to the settling pond before finally passing through a filter and eventually discharging to the Bay.

Though maintained as discussed above, during and after storm events, the clogging filter can cause stormwater to back up and pool in the basins for sustained periods. Once the basins are graded and paved as proposed, they will capture and convey stormwater more effectively. However, they will no longer provide any wetland benefits.

Wetlands typically provide a wide variety of important benefits including absorption of storm energy, flood storage, erosion control, water filtration, and wildlife habitat. In this case, the wetlands are elevated above the bay and lack hydrological connection to the bay and thus are not effective at absorbing tide energy and buffering storm surge. In addition, the wetlands actually reduce the storage capacity of the containment basins and put the stormwater management system at risk of clogging and overflowing, and therefore are not improving floodwater storage or erosion control. Furthermore, the filling of the wetlands will prevent the ongoing contamination of stormwater onsite and reduce the risk of hydrocarbon-contaminated runoff or groundwater entering Humboldt Bay and thus will be more beneficial for water quality than the water filtration function provided by the wetlands. In addition, as noted above, the stormwater runoff that collects in the basins entrains contaminants from the existing soil and groundwater contamination. Insects, amphibians, birds, and other wildlife that might exist within or visit the basins may ingest or otherwise take in contamination from the water or from the soil lining the basin sides and bottoms and be adversely affected.

Given that (1) the containment basins were designed and continually maintained as a water quality feature and will continue to be used as a water quality feature once they are graded and paved; (2) the wetland conditions have developed as a direct result of the containment basins' stormwater management function; and (3) the filling of the wetlands in the basins will reduce the risk of hydrocarbon contamination adversely affecting wildlife, the Commission finds that no mitigation is necessary for the loss of seasonal wetlands associated with the project.

c. Outfall modification-related impacts to birds

Over 260 species of birds, including 39 species of shorebirds and 26 species of raptors have been seen in the vicinity of Humboldt Bay. In recognition of the species richness and abundance found in and around Humboldt Bay, the bay has been identified as an Important Bird Area by the National Audubon Society and as a site of International Importance by the Western Hemisphere Shorebird Reserve Network (USFWS & Humboldt Bay National Wildlife Refuge, 2009).

According to the May 2014 Natural Resource Assessment conducted for the project site by SHN, potential migratory bird nesting habitat exists in the pampas grass on the waterfront of Humboldt Bay, immediately adjacent to the proposed outfall modification work areas. If nests exist in this pampas grass habitat, the proposed excavation of nearby areas could cause nest abandonment and/ or loss of eggs or young. In addition, one special status bird species, the osprey (*Pandian haliaetus*) has a potential to occur near the project area in neighboring industrial sites where light poles and other potential nesting structures exist. During a January 9, 2014 site visit by an SHN biologist, no active or historical osprey nests were observed. Because no nests have been observed in the project vicinity and because ambient noise levels at the site are not expected to increase significantly during project construction, no impacts to nesting birds are anticipated.

However, to avoid any potential impacts to nesting birds including osprey, the applicant proposes to conduct ground disturbance activities associated with the project outside the avian breeding/ nesting season during September through January. Alternatively, if vegetation removal or ground disturbance is to take place during the nesting season, the applicant proposes to hire a qualified biologist to conduct pre-construction surveys for nesting birds no more than 14 days prior to the commencement of work. To ensure resource protection, the Commission imposes these recommendations as a requirement under **Special Condition 3**. This special condition also requires that if any active nesting habitat is identified within 300 feet of the limits of work, construction must be delayed until after the young have fledged, as determined during surveys by a qualified biologist. With the addition of Special Condition 3, the Commission finds that the project is protective of potential nesting habitat for migratory birds, including osprey.

d. <u>Construction-related impacts to marine resources and the biological productivity and</u> <u>quality of coastal waters</u>

The proposed project involves construction in and adjacent to Humboldt Bay that could potentially result in sediments, debris, or hazardous materials entering the bay and impacting water quality and aquatic habitat. To minimize temporary construction impacts to water quality and aquatic habitat, the Commission imposes **Special Condition 2** requiring adherence to certain construction-related responsibilities. As discussed more extensively under Finding IV-E, this special condition includes requirements to avoid construction during rainfall, prevent and contain erosion and run-off, ensure proper disposal of excavated soils and other construction waste, prevent and control accidental spills, minimize areas of disturbance, and conduct in-water work during outgoing low tides. This special condition also includes provisions to avoid impacts to eelgrass beds and salt marsh habitat in the vicinity of the project or obtain a Commission amendment to this coastal development permit if impacts to these sensitive habitats cannot be avoided.

The waters of Humboldt Bay provide habitat for four federally threatened fish populations (green sturgeon, coho salmon, Chinook salmon, and steelhead) that could be impacted by the proposed construction work. As previously discussed under Finding IV-E, NMFS issued a concurrence letter (Exhibit 10) to the Army Corps for the Army Corps' review of the associated Section 404 permit for the outfall pipe portion of the subject project. NMFS concluded that given (1) the proposed BMPs including the use of a cofferdam around the intertidal work area and the limitation on intertidal work to low tides, (2) the small spatial extent of the project (0.015 acres), (3) the temporary nature of impacts to habitat (up to five days of work), and (4) the abundance of available critical habitat within Humboldt Bay outside the project area, the project is not likely to adversely affect threatened coho salmon, Chinook salmon, Steelhead, green sturgeon or their critical habitat.

The Commission finds that based on: (1) the attachment of Special Condition 2; (2) the avoidance of eelgrass and salt marsh habitat; and (3) the NMFS concurrence letter and its findings that the proposed project will not likely adversely affect sensitive fish species; the proposed project will minimize adverse environmental impacts of construction on marine resources and the biological productivity and quality of coastal waters.

Conclusion

Therefore, the Commission finds that the proposed project, as conditioned, includes feasible mitigation measures to minimize all significant adverse impacts associated with the proposed filling of coastal waters consistent with the mitigation requirements of Section 30233 and the conflict resolution requirements of Section 30007.5 of the Coastal Act.

H. Archeological Resources

Section 30244 of the Coastal Act states as follows:

Where development would adversely impact archeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The project area is located within the ethnographic territory of the Wiyot Indians. The Wiyot depended heavily on the resources of Humboldt Bay and lived in several villages along the shores of the bay. Based on the pattern of Wiyot settlements and the location of the project site adjacent to Humboldt Bay, the project area has the potential to contain buried archaeological deposits or features.

The applicant has submitted a 1940s era site photograph showing that the portion of the site west of Tank Farm 1 was historically part of Humboldt Bay (Exhibit 7). Based on this photographic evidence, Tank Farms 2 and 3, the proposed project staging area, and the stormwater outfall pipe are all located on recent fill west of Tank Farm 1. The applicant has also submitted geologic cross sections of the site showing fill on the site ranging from four to twelve feet deep. Because the project is located on a heavily-impacted industrial site covered with a thick layer of relatively recent fill, it is unlikely that archaeological or cultural resources will be disturbed by the proposed work.

Coastal Commission staff referred the application including the 1940s photograph and the soils information to the Tribal Historic Preservation Officers (THPOs) for the Blue Lake Rancheria, Bear River Rancheria, and Wiyot Tribe. All three THPOs responded that the project be permitted with the condition that, in the event that archaeological resources are encountered during construction activities, all onsite work ceases, a qualified archaeologist evaluates and assesses the significance of the discovery, and the THPOs are contacted immediately.

In response to the request of the tribal representatives, and to ensure protection of any archaeological or cultural resources that may be discovered at the site during construction of the proposed project, the Commission attaches **Special Condition** <u>4</u>. This condition requires that if an area of archaeological deposits is discovered during the course of the authorized development,

all ground-disturbing activities must cease, and the THPOs must be contacted. To recommence construction following discovery of archaeological deposits, the applicant is required to submit a supplementary archaeological plan for the review and approval of the Executive Director, prepared in consultation with appropriate tribal representatives, to determine whether the changes are de minimis in nature and scope, or whether an amendment to this permit is required.

Thus, the Commission finds that the proposed development, as conditioned, is consistent with Coastal Act Section 30244, as the development will include mitigation measures to ensure that the development will not adversely impact archaeological resources.

I. Visual Resources

Section 30251 of the Coastal Act states in applicable part:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality of visually degraded areas.

The proposed project is located on a waterfront property on Humboldt Bay that is visible from many public vantage points in and around the bay. While the site can be seen from many public vantage points, the proposed site improvements are all low-lying features that will not block views to or along the bay and will have minimal visual impact. Paving the site will result in the loss of approximately two acres of wetlands and a variety of mostly ruderal vegetation, as well as any wildlife this habitat attracts. However, the area proposed to be filled and paved is at the interior of the site and is largely screened from public view by intervening site features such as buildings, perimeter fences, and the over 500 willows, cottonwoods, and alters planted on-site as a phytoremediation system. In addition, although 2.7 acres of the Renner Bulk Plant will be graded and paved, there will be no substantial alternation of landform as the three containment basins will be re-contoured to continue to drain towards a settling pond in Tank Farm 2 as they do currently. In addition, no substantial alteration of ground contours is proposed as a result of the outfall pipe modification component of the project.

Even if the proposed improvements were visible from public vantage points, these features would not be out of character with the surrounding area. As previously described, the subject property is located along the City of Eureka's industrial waterfront with a log deck and dock to the north, a chip export facility to the south, and a lumber yard and mill to the east. The proposed site improvements and the potential resulting greater industrial use of the site will blend with the industrial character of the surrounding area.

Therefore, the Commission finds that the proposed development is consistent with Section 30251 of the Coastal Act as the development would not block views to and along the coast, would not involve the alteration of land forms, and would not result in any change to the visual character of the coastal area.

J. PUBLIC ACCESS

Section 30210 of the Coastal Act requires that maximum public access shall be provided consistent with public safety needs and the need to protect natural resource areas from overuse. Section 30212 of the Coastal Act requires that access from the nearest public roadway to the shoreline be provided in new development projects, except where it is inconsistent with public safety, military security, or protection of fragile coastal resources, or where adequate access exists nearby. Section 30211 of the Coastal Act requires that development not interfere with the public's right to access gained by use or legislative authorization. Section 30214 of the Coastal Act provides that the public access policies of the Coastal Act shall be implemented in a manner that takes into account the capacity of the site and the fragility of natural resources in the area. In applying Sections 30210, 30211, 30212, and 30214, the Commission is also limited by the need to show that any denial of a permit application based on these sections or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential access.

Although the proposed project is located between the first public road and Humboldt Bay, an inlet of the sea, the development will not adversely affect public access to or along the bay. The project is located on two parcels that are zoned for coastal-dependent industry that have been used for industrial purposes for decades. The project will not displace any existing public access facilities as no public access currently exists in the project vicinity and there is no history of public use. In addition, the project will not increase demand for public access facilities, as it will involve no expansion of use, will not increase population density in the area, and will not otherwise draw more people to the waterfront.

Public access to the bay is currently available nearby at the foot of Del Norte Street one-third mile south of the site and at Marina Way one-half mile north of the site. Railroad Avenue, which is proposed as part of the future Eureka Waterfront segment of the California Coastal Trail, provides a continuous upland lateral link between the two access points. Adding additional vertical or lateral public access across the subject industrial parcels would be inconsistent with public safety needs and the security and operational needs of the fuel storage facility.

Therefore the Commission finds that the proposed development will not have any significant adverse effects on public access, and is consistent with the requirements of Coastal Act Sections 30210, 30211, 30212, and 30214.

K. California Environmental Quality Act

The Humboldt Bay Harbor, Recreation and Conservation District served as the lead agency for the project for CEQA purposes. The Harbor District filed a notice of exemption for the project on October 18, 2014 pursuant to Section 15301 of the CEQA Guidelines (Existing Facilities) which exempts the repair of existing structures involving negligible or no expansion of use. Section 13906 of the Commission's administrative regulation requires Coastal Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are any feasible alternatives or feasible mitigation

measures available, which would substantially lessen any significant adverse effect the proposed development may have on the environment.

The Coastal Commission's review and analysis of CDP applications has been certified by the Secretary of Resources as being the functional equivalent of environmental review under CEQA. As a responsible agency, the Commission conducted its analysis of the potential impacts of the proposed development that the Commission is authorized by the Coastal Act to review. The Commission has reviewed the relevant coastal resource issues associated with the proposed project and has identified appropriate and necessary conditions to assure protection of coastal resources consistent with the requirements of the Coastal Act. The staff report discusses the relevant coastal resource issues with the proposed development. All public comments received to date have been addressed in the staff report, including staff's oral presentation and the findings adopted by the Commission. The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As conditioned, there are no additional feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse environmental effect that approval of the proposed project, as modified, would have on the environment. Therefore, the Commission finds that the proposed project can be found to be consistent with the Coastal Act and CEQA Section 21080.5(d)(2)(A).

APPENDIX A SUBSTANTIVE FILE DOCUMENTS

- Covenant and Environmental Restriction on Property; Instrument No. 2006-13527-8. (Recorded May 8, 2006); Humboldt County.
- File for Coastal Development Permit No. 1-14-1053.
- First Half 2014 Semiannual Groundwater Monitoring and Remediation Progress Report, Former Tosco/ Unocal Bulk Terminal #0201. Prepared by TRC. (August 13, 2014).
- Geologic Cross-Sections for the Unocal Bulk Terminal. Prepared by Pacific Environmental Group, Inc. (May 11, 1995).
- Letter to Mr. John Friedenbach of L&M Renner Inc.; Subject: *Operation and Maintenance of Stormwater Treatment System Located at the Tosco Terminal #0201, Eureka, California.* Prepared by SHN Consulting Engineers & Geologists, Inc. (December 8, 1999).
- Lines of Geologic Cross-Sections and Hydrocarbon Concentration Map for the Unocal Bulk Terminal. Prepared by Pacific Environmental Group, Inc. (May 17, 1995).
- L&M Renner, Inc, DBA Renner Petroleum Eureka Bulk Plant Spill Prevention Control and Countermeasure Update (SPCC) Plan. Prepared by Winzler & Kelly. (January 2011).
- Natural Resources Assessment for the Renner Bulk Plant Stormwater Improvement and Tide Gate Project. Prepared by SHN Consulting Engineers & Geologists, Inc. (May 2014).
- Notice of Final Action and Findings for Approval of City of Eureka Coastal Development Permit CDP-05-021. (Post-Certification No. 1-EUR-06-070).
- Notice of Final Action and Findings for Approval of City of Eureka Coastal Development Permit CDP-06-013. (Post-Certification No. 1-EUR-07-055).
- Notice of Final Action and Findings for Approval of City of Eureka Coastal Development Permit CDP-09-0005. (Post-Certification No. 1-EUR-09-209).
- Remedial Action Plan Review, Former Tosco/Unocal Bulk Terminal #0201. Prepared by TRC. (July 2013).
- Remedial Action Plan; Tosco Terminal #0201. Prepared by SHN Consulting Engineers & Geologists, Inc. (July 2000).
- Storm Water Pollution Prevention Plan for the Tosco Bulk Terminal #0201, Eureka, California. Prepared by SHN Consulting Engineers & Geologists, Inc. (December 1998).

Humboldt Bay National Wildlife Refuge: Comprehensive Conservation Plan and Final Environmental Assessment. Prepared by U.S. Fish and Wildlife Service & Humboldt Bay National Wildlife Refuge Complex. (September 2009).

APPENDIX B BACKGROUND ON MONITORING & REMEDIATION OF ONSITE CONTAMINATION

Contamination

Historic use of the site as a bulk fuel terminal has resulted in soil and groundwater contamination with petroleum hydrocarbons and Halogenated Volatile Organic Compounds (HVOCs). Petroleum hydrocarbons detected in soil and groundwater on site include Total Petroleum Hydrocarbons as Diesel (TPH-d) and Gasoline (TPH-g); Benzene, Toluene, Ethylbenzene, total Xylenes (BTEX); Methyl Tertiary-Butyl Ether (MTBE); and Bunker C Fuel Oil. HVOCs that have been identified on site include Trichloroethene (TCE), Tetrachloroethene (PCE), Vinyl Chloride (VC), cis 1,2-Dichloroethene, and trans 1,2-Dichloroethene (collectively referred to as DCE).

Regulation

To address soil and groundwater contamination, the Regional Water Quality Control Board (Regional Board) has overseen various phases of investigations and remedial actions at the site since 1986 (Cleanup Site Case #1NHU463). The most recent Cleanup and Abatement Order No. R1-2000-02 was issued by the Regional Board in January 2000, and the current Remedial Action Plan was produced by SHN in July 2000. In addition, a Soil and Groundwater Management Contingency Plan was produced by SHN in March 2006 to minimize the threat of worker exposure to on-site contamination, and a restrictive covenant was recorded on the property on May 8, 2006 to limit exposure scenarios (Instrument No. 2006-13527-8).

Monitoring

A total of 34 groundwater monitoring wells and 12 groundwater extraction wells have been installed on and around the site. The first three monitoring wells were installed in February 1986 and the most recent monitoring well was installed in October 2002. All 12 extraction wells were installed in October 2002. The site also formerly contained 22 piezometers constructed in 1993 and 1994, but these were later destroyed by pressure grouting in July 2006. Groundwater monitoring at the site is currently performed on a semiannual basis in accordance with the Regional Board's Revised Monitoring and Reporting Program issued on February 13, 2013 (MRP #R1-2013-0017).

Remedial Activities

Past environmental investigations conducted under various cleanup and abatement orders issued by the Regional Board have detected petroleum hydrocarbons and Halogenated Volatile Organic Compound (HVOCs) in the site's soil, and a gasoline plume, multiple diesel plumes, three Bunker C plumes, and an HVOC plume in the groundwater. The majority of HVOC and petroleum hydrocarbon contaminated soils were excavated in 1998 and 1999, while active remediation of the dissolved plumes of gasoline, diesel, and HVOCs began in the early 1990s and is still underway. The Bunker C plumes do not have a technologically achievable remedy and will remain on site for the foreseeable future. Below is a partial list of remedial activities that have occurred over the years:

- A remediation trench was installed for soil vapor extraction (SVE) and air sparging in 1994. The air sparging was deactivated in 1996 and the SVE system was shut down in 1997. While operational, the SVE system removed 3,500 pounds of TPH-g.
- In 1997, passive skimmers were installed on 3 monitoring wells, sorbent socks were installed in four monitoring wells, and monthly bailing of three piezometer wells was initiated.
- The remediation trench was reactivated and 10 biosparge points were installed in the vicinity of the HVOC source area in 1998.
- The majority of HVOC contaminated soil was excavated in 1998 and 1999 (approximately 1,190 tons of soil) to remove this potential future source of groundwater contamination.
- A new biosparge system was installed in 1999 at the HVOC source area to remove any residual HVOCs from the subsurface, and the old biosparge system was converted into a bioventing operation. In addition, the new stormwater system (described in detail in this staff report) was installed in 1999 which includes Granular Activated Carbon treatment.
- Weekly bailing of three monitoring wells began in 2000.
- In 2002, 18 biosparge wells and twelve extraction wells were installed.
- In 2003, the biosparge system was expanded to introduce air into three different areas and a dual phase extraction (DPE) system was installed.
- A phytoremediation system was installed from May to July 2007 to replace the DPE and the biosparge systems, which were reaching limits of effectiveness and were no longer considered viable technologies for the long term. The DPE and biosparge systems were shut down in June 2008 and June 2009, respectively, to allow the phytoremediation to take over as the primary remediation measure. While operational, the DPE removed a total of approximately 14.4 million gallons of SPH/groundwater mixture resulting in the removal of approximately 3,689 pounds of petroleum hydrocarbons.
- Absorbent socks were installed in four wells in 2008 and a passive skimmer was installed in one well in 2009.

Current Conditions

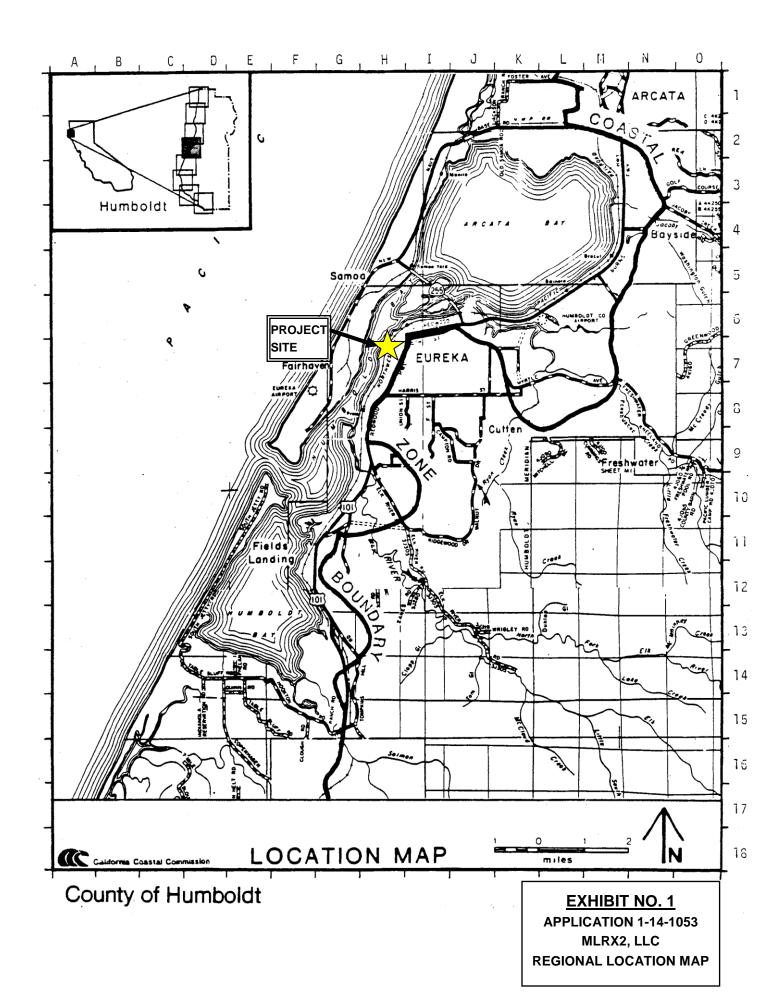
A Remedial Action Plan Review was conducted by TRC in July 2013 to evaluate the effectiveness of remedial measures performed at the site to date. According to the report, current active remediation at the site includes (1) removal of separate phase hydrocarbon (SPH) from select monitoring and extraction wells by absorbent socks, a passive skimmer, and hand bailing on a weekly basis and (2) ongoing phytoremediation of soil and groundwater contamination from over 500 willow, cottonwood, and red alder trees planted on-site in 2007. According to 2014 monitoring results (TRC, August 2014), the absorbent media and hand bailing have significantly reduced measurable levels of SPH, and the phytoremediation system has successfully become established and begun to draw down groundwater in its vicinity. Monitoring results also indicate that while on-site contamination has been significantly reduced, the southeastern portion of the facility still contains free product and high levels of dissolved phase petroleum hydrocarbons that require further treatment. In addition, neighboring environmental cleanup sites may be contributing new contaminants to the site's groundwater. For example, a former Pacific Gas and

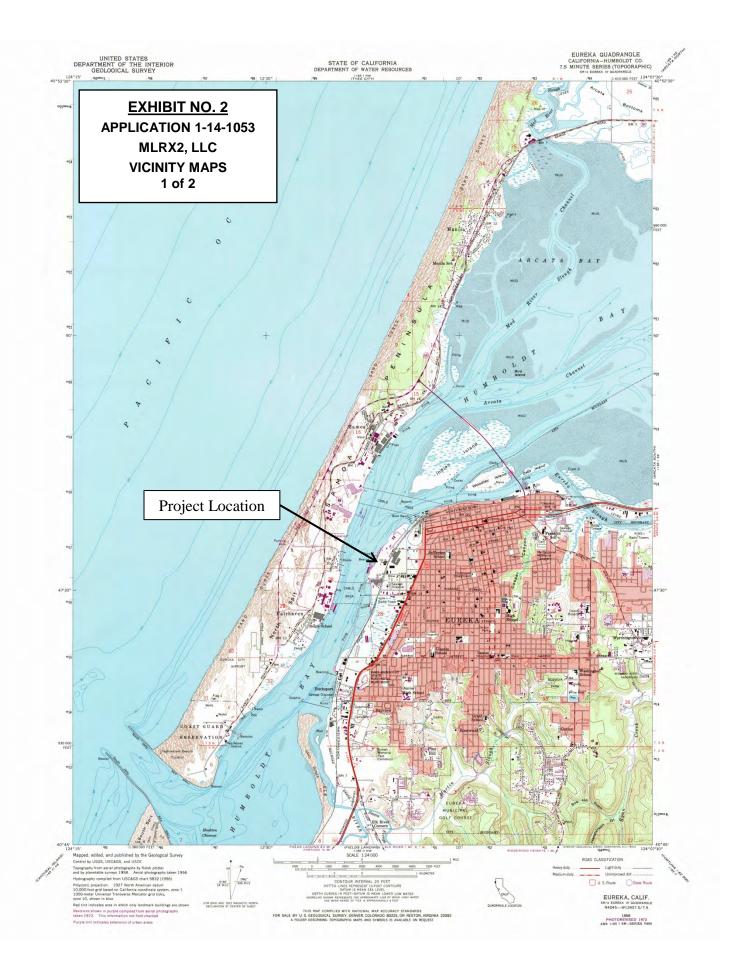
1-14-1053 (MLRX2, LLC)

Electric fuel pipeline located within 200 feet of the site may be a continuing source of Bunker-C fuel oil contamination.

References

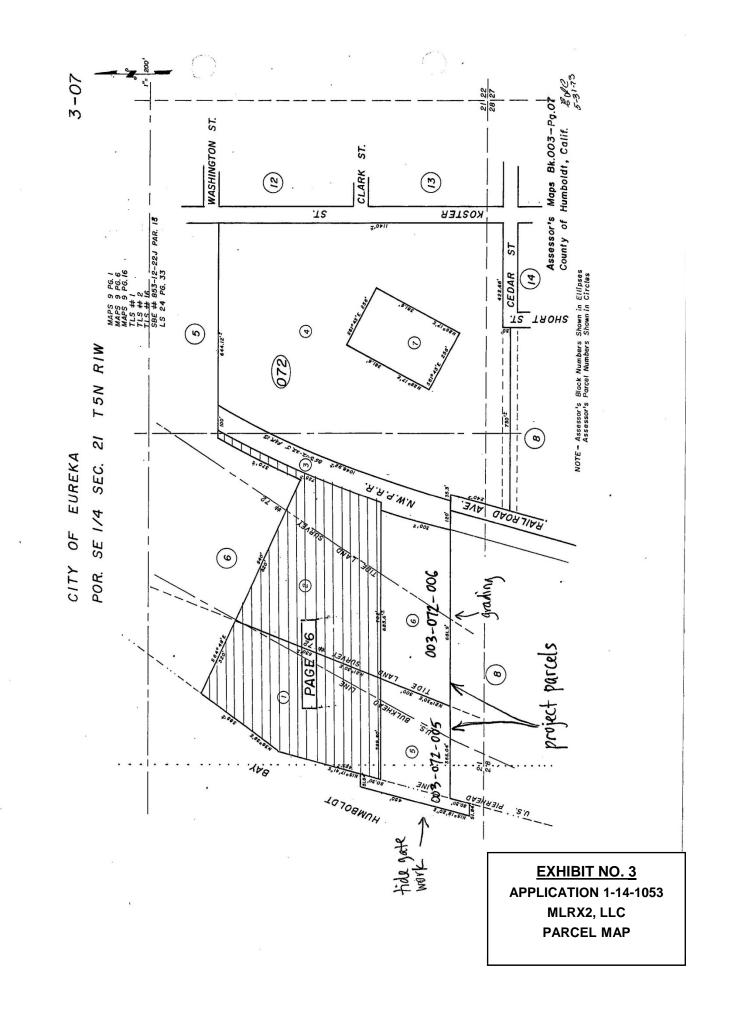
- Covenant and Environmental Restriction on Property; Instrument No. 2006-13527-8. (Recorded May 8, 2006); Humboldt County.
- First Half 2014 Semiannual Groundwater Monitoring and Remediation Progress Report, Former Tosco/ Unocal Bulk Terminal #0201. Prepared by TRC. (August 13, 2014).
- Remedial Action Plan Review, Former Tosco/Unocal Bulk Terminal #0201. Prepared by TRC. (July 2013).
- Remedial Action Plan; Tosco Terminal #0201. Prepared by SHN Consulting Engineers & Geologists, Inc. (July 2000).







(Bing Maps)



Renner Bulk Plant (Uplands Parcel)



Settling pond at the western edge of the Tank Farm 2 Containment Basin. The rocks are used to trap sediment before the stormwater is pumped through the filters.

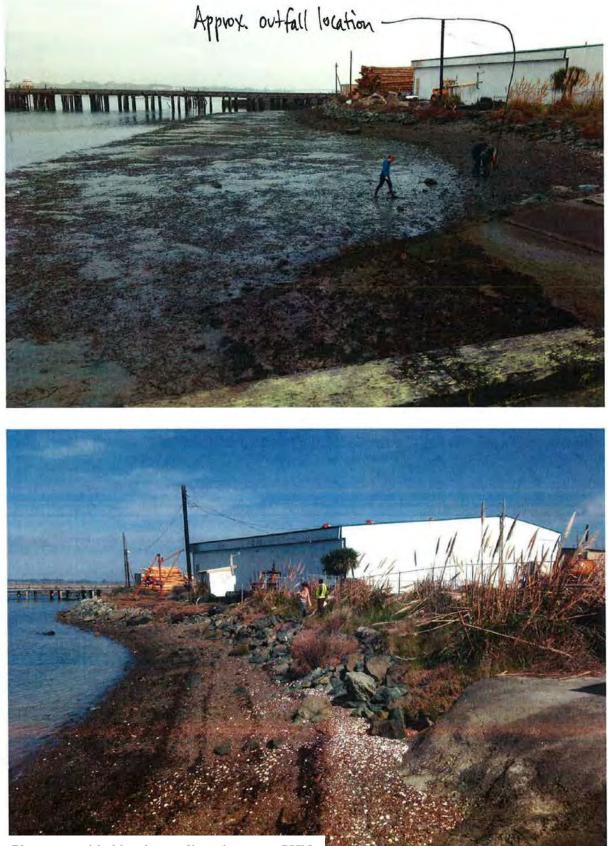


The eastern side of the Tank Farm 2 Containment Basin looking east towards the Tank Farm 1 Containment Basin. Tank Farm 2 was constructed with an earthen berm while Tank Farm 1 was constructed with a concrete berm.

Photos taken by Commission staff

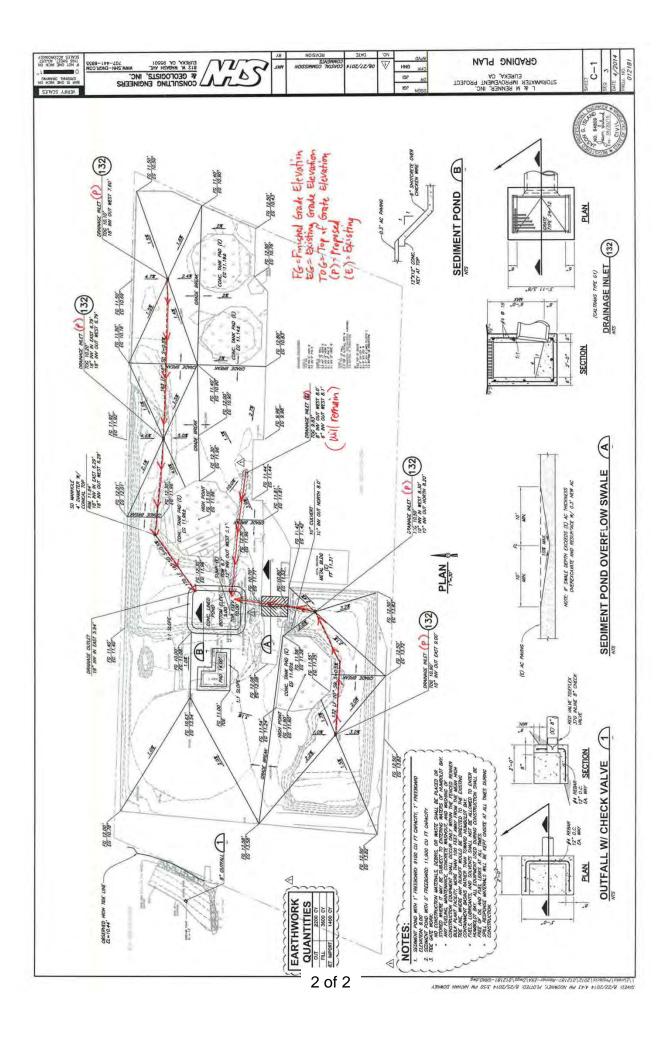
EXHIBIT NO. 4 APPLICATION 1-14-1053 MLRX2, LLC SITE PHOTOGRAPHS 1 of 2

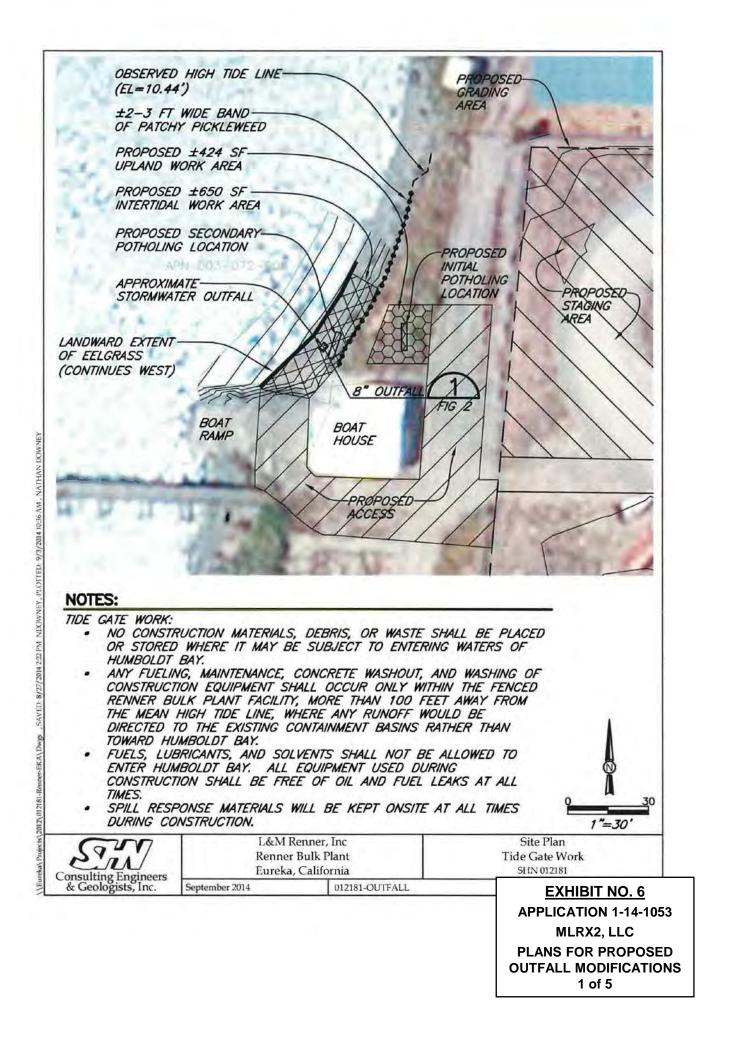
Tidelands Parcel

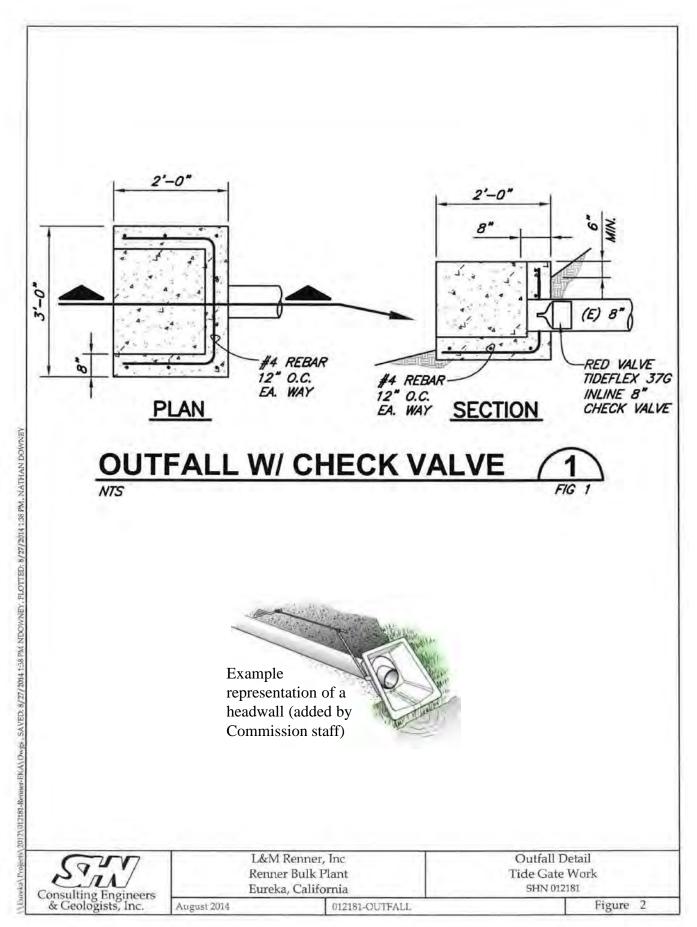


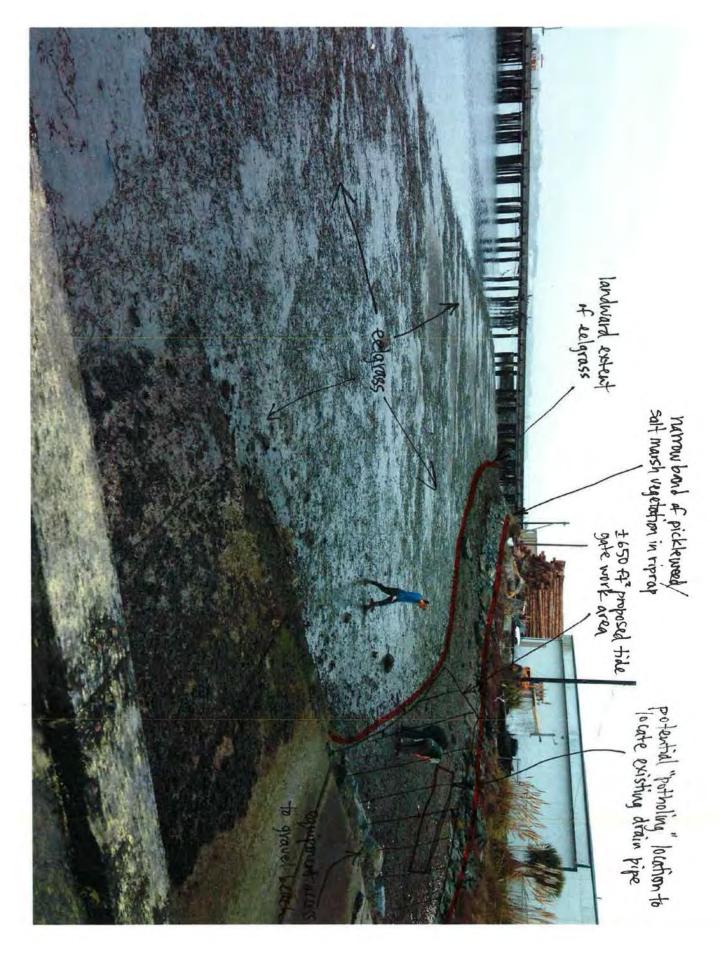
Photos provided by the applicant's agent, SHN

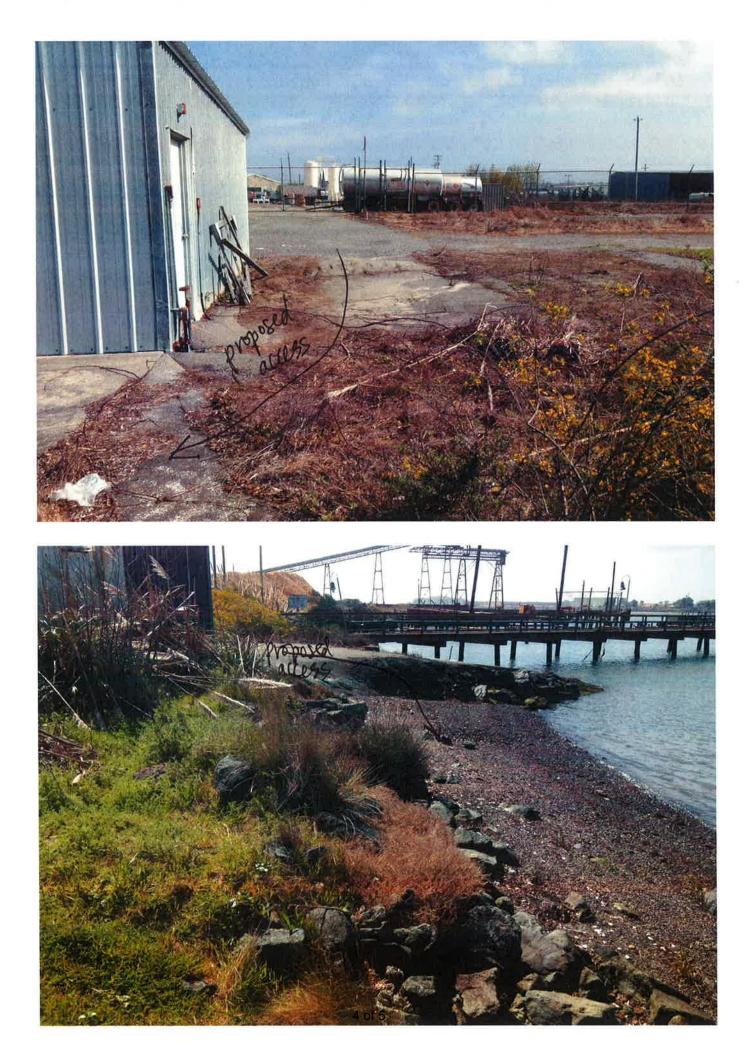


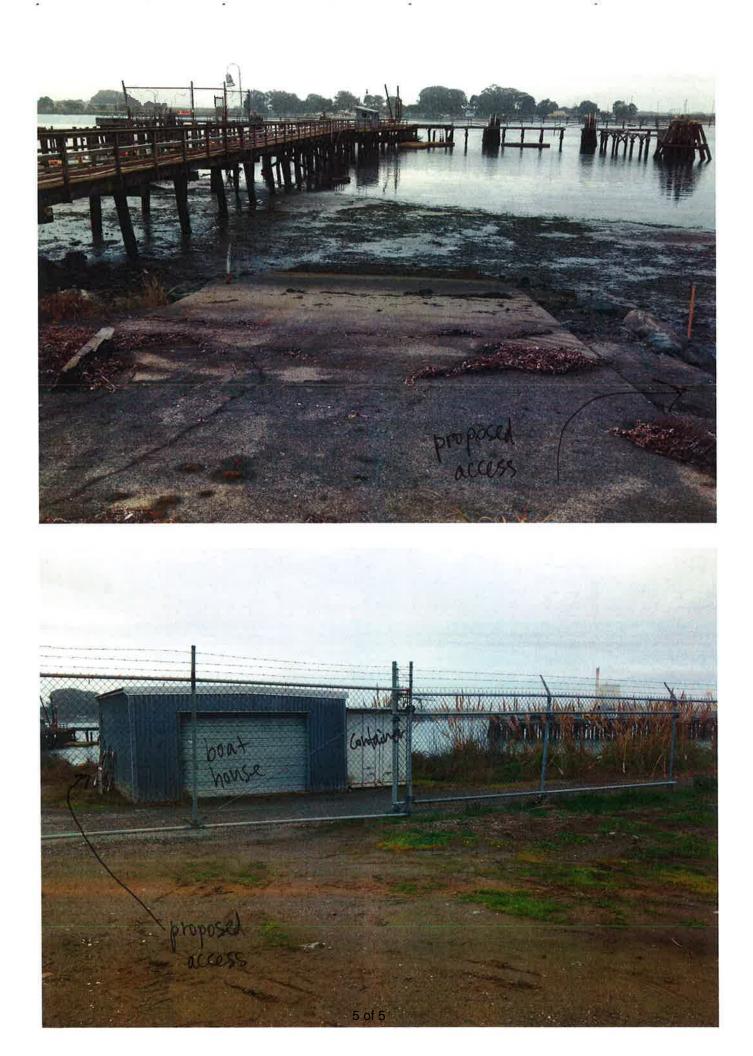


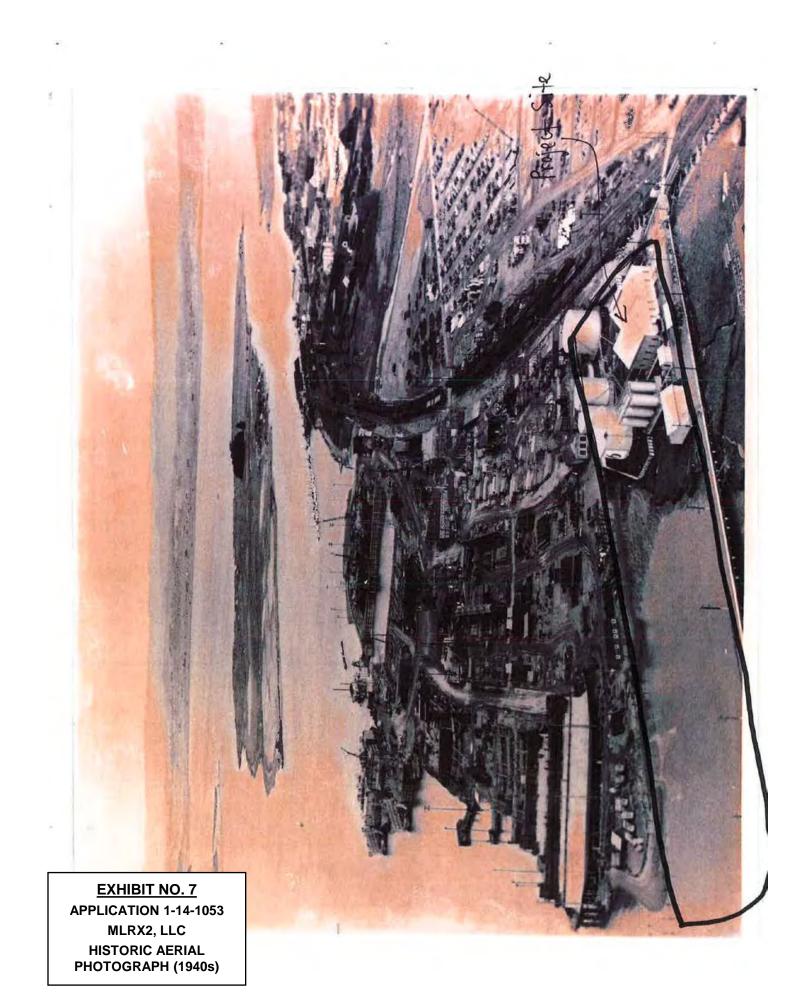


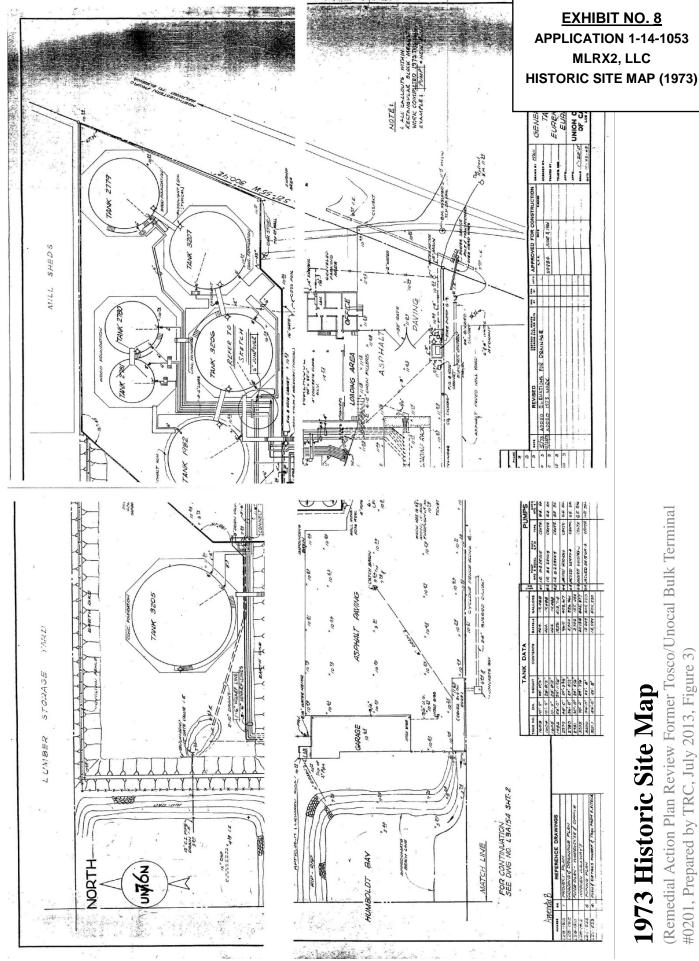




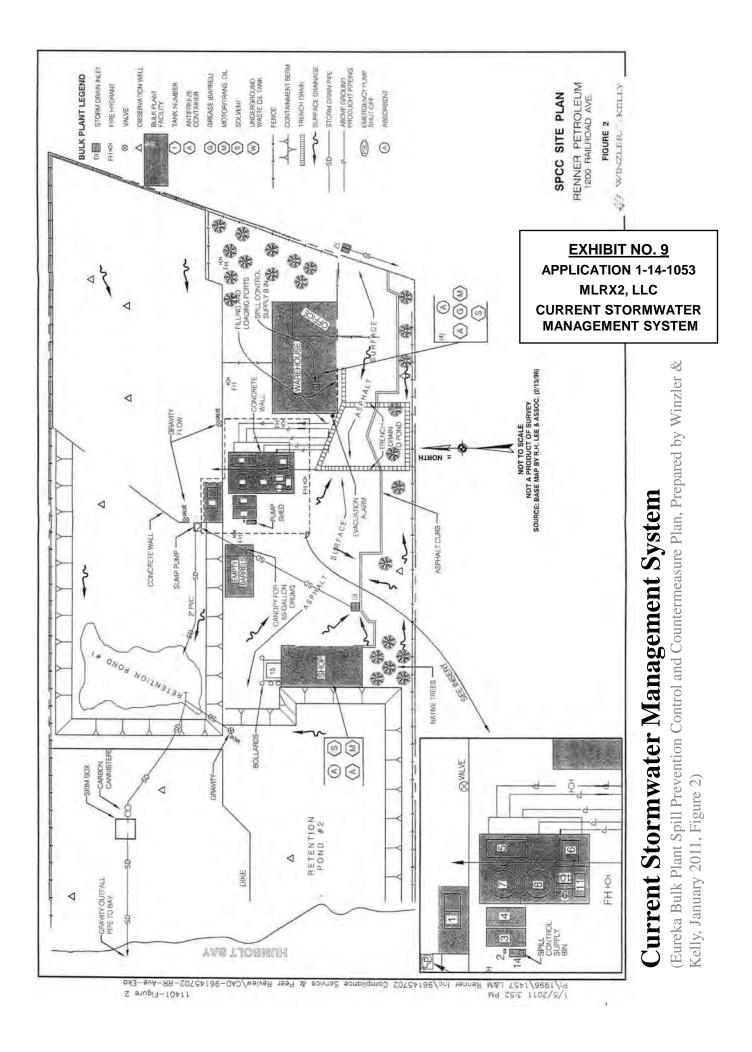


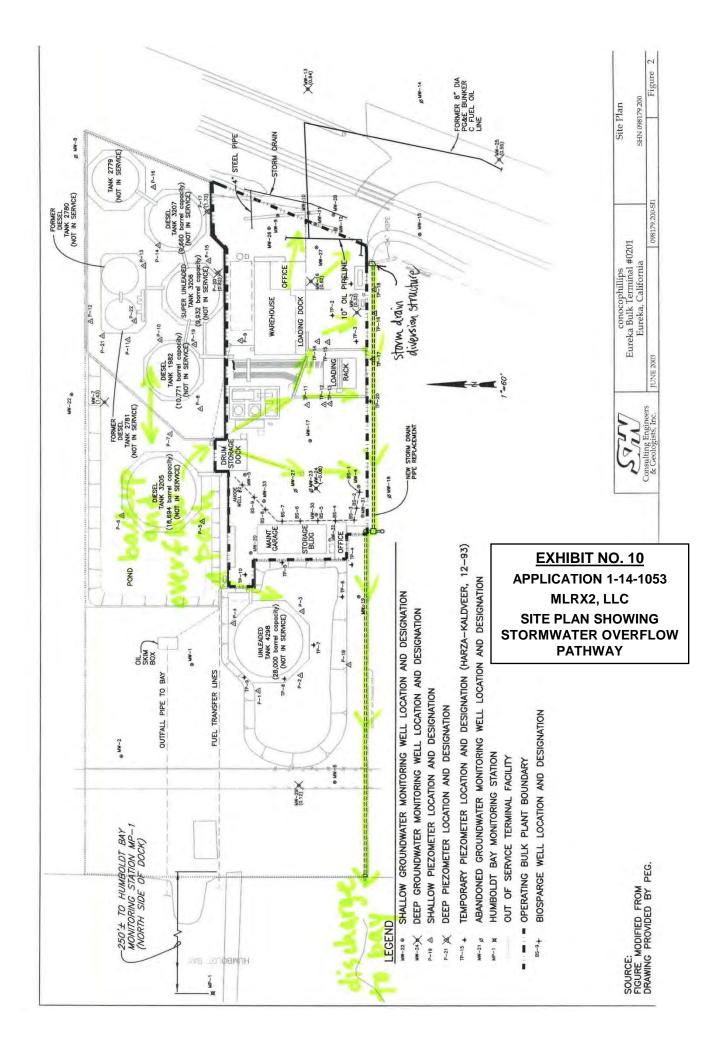


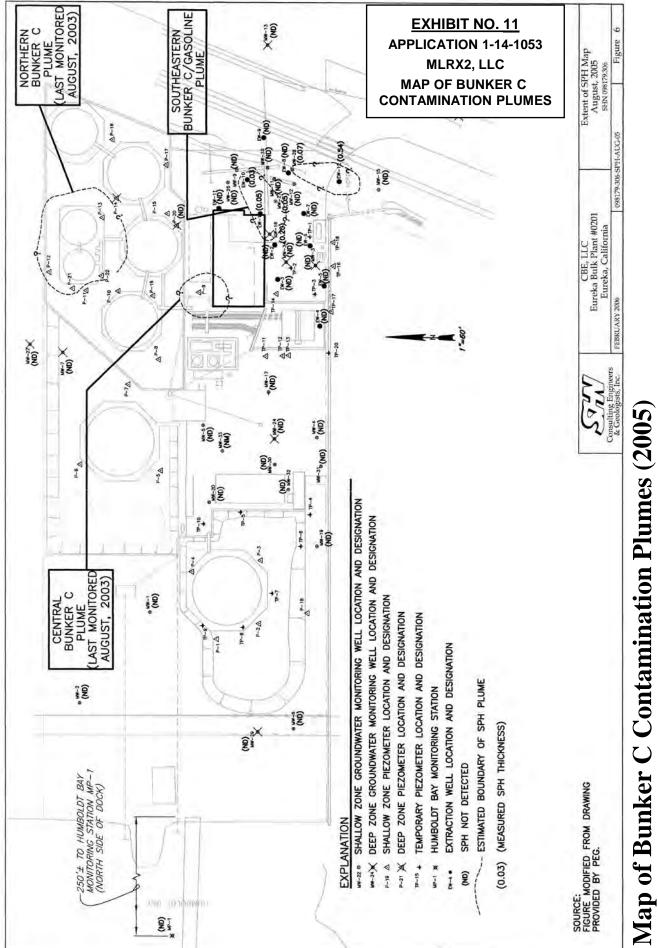




#0201, Prepared by TRC, July 2013, Figure 3)







(Soil and Groundwater Management Contingency Plan Former Tosco/Unocal Bulk Terminal #0201, Prepared by SHN, March 2006, Figure 6)



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE West Coast Region 1655 Heindon Road Arcata, California 95521-4573

FEB 1 3 2015

Refer to NMFS No: WCR-2015-2097

Jane Hicks, Chief Regulatory Division US Army Corps of Engineers San Francisco District 1455 Market Street San Francisco, CA 94103

Re: Endangered Species Act Section 7(a) (2) Concurrence Letter and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Response for the issuance of an U.S. Army Corps of Engineers Permit authorizing the Renner bulk plant facility tide gate improvement project.

Dear Ms. Hicks:

On January 16, 2015, NOAA's National Marine Fisheries Service (NMFS) received your request for a written concurrence that the U.S. Army Corps of Engineers (Corps) issuance of a Permit (file 2014-00330) to Mike Renner for a tide gate improvement project under Section 404 of the Clean Water Act (33 U.S.C. § 1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. § 403), is not likely to adversely affect (NLAA) species listed as threatened or endangered or critical habitats designated under the Endangered Species Act (ESA). This response to your request was prepared by NMFS pursuant to section 7(a) (2) of the ESA, implementing regulations at 50 CFR 402, and agency guidance for preparation of letters of concurrence.

NMFS also reviewed the proposed action for potential effects on essential fish habitat (EFH) designated under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), including conservation measures and any determination you made regarding the potential effects of the action. This review was pursuant to section 305(b) of the MSA, implementing regulations at 50 CFR 600.920, and agency guidance for use of the ESA consultation process to complete EFH consultation.

This letter underwent pre-dissemination review using standards for utility, integrity, and objectivity in compliance with applicable guidelines issued under the Data Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001, Public Law 106-554). The concurrence letter will be available through NMFS' Public Consultation Tracking System https://pcts.nmfs.noaa.gov/pcts-web/homepage.pcts. A complete record of this consultation is on file at NMFS Northern California Office, Arcata, CA.

EXHIBIT NO. 12

APPLICATION NO. 1-14-1053 MLRX2, LLC NMFS Concurrence Letter

1 of 11



Proposed Action

Background

The proposed action is a permit to authorize a tide-gate improvement project for a storm water outflow pipe located in Humboldt Bay. The storm water outflow drains the entirety of the Renner Bulk Plant Facility and the adjacent bulk fuel terminal. The above ground fuel storage tanks located on the bulk fuel terminal have been removed. However, the secondary containment basins still remain in place to collect all storm water generated on site. All storm water is pumped via the containment basins through a 10-micron bag filter and then through two 1,000-pound granular activated carbon beds. After passing through the filters, the water enters a concrete skim box and is released into Humboldt Bay via an outfall pipe.

The 8 inch outfall pipe used to discharge storm water from the concrete skim box has a top elevation of 5.3 feet and the bay end of the pipe is covered by mixed mud/gravel beach within the intertidal zone. The exact location of the bay end of the outflow pipe is unknown due to it being buried beneath the beach. SHN Consulting Engineers observed water percolating from the intertidal beach in the same location that the outflow pipe is suspected to be located. The observation of water percolating into the bay is consistent with the estimated location of the outfall pipe based on the elevation of the concrete skim box. It is unknown whether or not a tide gate is attached to the terminal end of the outfall pipe.

Construction equipment will access the project area through the Renner Bulk Plant facility entrance and through a gate located at the western edge of the facility. The equipment will access the work area via an existing concrete boat ramp leading to the beach on the southwest side of the facility. Equipment and materials will be staged 100 feet upland from the mean high tide line on a flat compacted gravel area within the bulk plant facility. Any construction activities occurring in the intertidal zone will be performed during outgoing low tides over a 5 day period. The proposed project has three phases that will occur during separate outgoing low tides: (1) locating the outfall pipe and tide gate by potholing; (2) outfall pipe and tide gate improvement; and (3) cofferdam removal and project completion.

Potholing

The practice of locating underground utilities using vacuum excavation or a backhoe to determine its horizontal and vertical location is termed potholing. Potholing is proposed in order to locate the end of the outfall pipe and tide-gate. The potholing will begin at an upland area using a backhoe or excavator and hand tools. The estimated maximum volume of excavated material is 40 cubic yards at the upland location. If necessary, potholing may extend in to the intertidal zone during an outgoing low tide. In the event that potholing extends into the intertidal zone an additional 40 cubic yards may be excavated in the intertidal area.

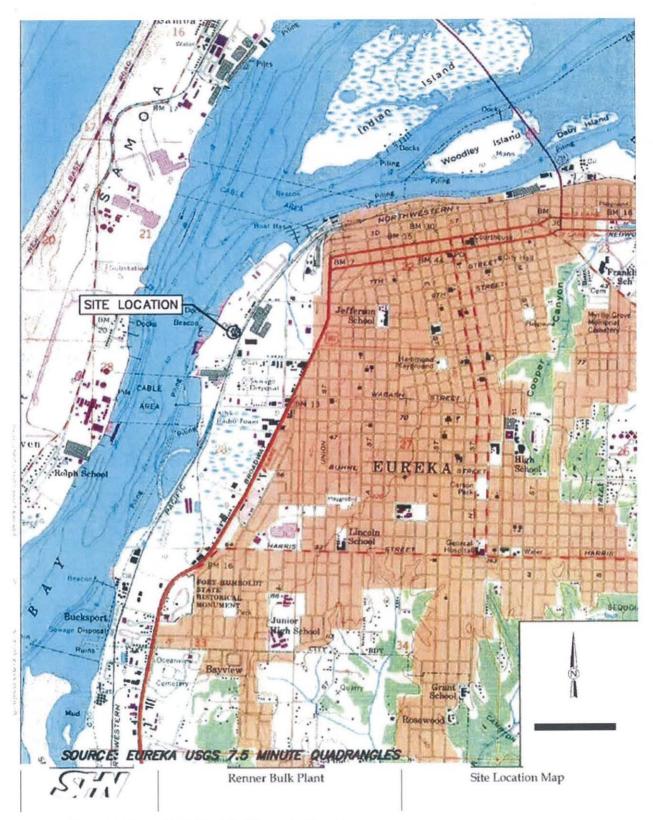


Figure 1: Renner Bulk Plant Facility project location.

Outfall Pipe/Tide Gate Improvement

A cofferdam or equivalent will be installed around the perimeter of the work area once the outfall pipe has been located. The tide-gate construction area will be enclosed by the cofferdam to control and minimize sediment and concrete pollution to Humboldt Bay. During an outgoing low tide, a small 2-foot by 3-foot concrete headwall will be installed at the bay end of the outfall pipe. The outfall pipe will have a check valve to prevent any inflow of water from Humboldt Bay (similar in function to a tidegate).

Best Management Practices and Minimization Measures

- No construction materials, debris, or waste shall be placed or stored where it may be subject to entering waters of Humboldt Bay.
- Fuels, lubricants, and solvents shall not be allowed to enter Humboldt Bay. All equipment used during construction shall be free of oil and fuel leaks at all times.
- Any fueling, maintenance, and washing of construction equipment shall occur only within the fenced Renner Bulk Plant facility, more than 100-feet away from the mean high tide line, where any runoff would be directed to the existing containment basins rather than toward Humboldt Bay.
- Washing of equipment will ensure equipment is free of hazardous fuels, chemicals, and solvents prior to working in the intertidal area.
- Spill response materials will be kept onsite at all times during construction.
- Conducting work during low tides avoids working within the water, minimizing sediment discharge in to Humboldt Bay and avoids the crushing of listed species.

Action Area

Under the ESA, the "action area" means all the areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR 402.02). The action area is comprised of the upland areas used for staging and access, the benthic habitat of the intertidal work area, and a localized area within Humboldt Bay where sediment may be temporarily suspended. The tide-gate work area is located between an adjacent eel grass bed and the mean high tide line and measures approximately 650 square feet (0.015 acres). Suspended sediment is estimated to travel a maximum of 300 meters from the work area during and after the removal of the cofferdam (Figure 2). Neither interdependent nor interrelated activities are expected to occur, thus the action area is limited to the work conducted on site and the aforementioned area subject to sediment suspension in Humboldt Bay.

Listed Species and Designated Critical Habitat in the Action Area.

Southern Oregon/Northern California Coast (SONCC) coho salmon (*Oncorhynchus kisutch*) evolutionarily significant unit (ESU)

- Threatened (70 FR 37160; June 28, 2005)
- Critical habitat (64FR 24049; May 5 1999)

California Coastal (CC) Chinook salmon (Onchorhynchus tshawytscha) ESU

• Threatened (70 FR 37160; June 28, 2005)

• Critical habitat (70 FR 52488; September 2, 2008)

Northern California (NC) steelhead (Onchorhynchus mykiss) distinct population segment (DPS)

- Threatened (71 FR 834; January 5, 2006)
- Critical habitat (70 FR 52488; September 2, 2005)

Southern DPS North American green sturgeon (Acipenser medirostris)

- Threatened (71 FR 17757; April 7, 2006)
- Critical habitat (74 FR 52300; October 9, 2009)



Figure 2: The tide gate improvement action area. Note: highlighted area in channel is extent of sediment discharge.

Action Agency's Effects Determination

The Corps determined that the project may affect, and is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC Steelhead, and Southern DPS North American green sturgeon and their designated critical habitat. In addition, the project has been reviewed for consistency with the SONCC coho recovery plan for the Humboldt Bay Tributaries population segment by NMFS. The project will mobilize sediment leading to a temporary increase in turbidity. Salmonids and Southern DPS green sturgeon exposed to the slight increases in turbidity have adequate suitable habitat elsewhere in the bay and will be able to avoid the effects of turbidity (SHN, 2014). The increase in turbidity could impact prey species availability and health, and disrupt foraging and migrating activities of the salmonids and sturgeon (SHN, 2014). The following activities may impact the listed species and critical habitat in the action area: (1) potholing; (2) cofferdam installation; (3) cofferdam removal; (4) temporary loss of area behind cofferdam. The listed species will have the ability to return to the action area due to the temporary nature of the effects in the event that listed species fled the action area. The Corps predicts that the sedimentation and increased turbidity in the action area will be minimized through implementation of the proposed BMPs resulting in their "not likely to adversely affect" determination."

ENDANGERED SPECIES ACT

Effects of the Action

Under the ESA, "effects of the action" means the direct and indirect effects of an action on the listed species or critical habitat, together with the effects of other activities that are interrelated or interdependent with that action (50 CFR 402.02). The applicable standard to find that a proposed action is not likely to adversely affect listed species or critical habitat is that all of the effects of the action are expected to be discountable, insignificant, or completely beneficial. Beneficial effects are contemporaneous positive effects without any adverse effects to the species or critical habitat. Insignificant effects relate to the size of the impact and should never reach the scale where take occurs. Discountable effects are those extremely unlikely to occur.

Effects to Salmon, Steelhead, and Green Sturgeon Critical Habitat

The action area is within Humboldt Bay, which contains estuarine critical habitat for salmon and steelhead that connects freshwater habitat and the marine habitat of the Pacific Ocean. The Humboldt Bay Tributaries populations of SONCC coho salmon have essential habitat features located in the action area are substrate, water quality, water quantity, food, space, and safe passage conditions. The SONCC coho recovery plan lists key stresses that exist in the action area such as impaired water quality and impaired estuary function (NMFS, 2014). The action area contains primary constituent elements (PCE) of critical habitat for CC Chinook salmon and NC steelhead, which support migratory corridor and rearing habitat and areas with minimal obstructions and predatory threats. In addition, the action area contains the required water quality and quantity conditions for the species transition between fresh and saltwater environments; and the aquatic vegetation and foraging elements necessary for maturation such as

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invertebrates and fishes. Increased turbidity from potholing and cofferdam removal could reduce water quality in migratory corridors leading to a decrease the amount of available prey in the action area. Due to the action occurring during low tides, small spatial extent (0.015 acres), and temporary nature of the increased turbidity, the potential impacts to feeding and migratory function of the critical habitat are insignificant.

Critical habitat PCEs for green sturgeon are also found in Humboldt Bay. These include food, water flow, water quality, water depth, sediment quality, and migratory corridors which support green sturgeon. Green sturgeon prey such as epibenthic and benthic invertebrates, Dungeness crab, and various species of clams are found in the intertidal mudflats and sub tidal channels. Green sturgeon use deep water channels of Humboldt Bay as a migratory corridor to reach rearing and holding habitat, most of which is found north of the project area, in Arcata Bay. The potholing and cofferdam installation/removal could increase turbidity temporarily in the action area. The turbidity increase could impact the availability of prey species and water quality in green sturgeon critical habitat. The spatial extent of the turbidity increase is limited to 300 meters from the construction area. Therefore, there is an abundance of available critical habitat within Humboldt Bay outside of the action area. In addition, the sediment supended in the action area is expected to dissipate in approximately one hour upon the removal of the cofferdam. Thus, the ability to flee to critical habitat outside of the action area combined with the temporary nature of the impacts to critical habitat will result in an insignificant effect on the critical habitat of southern DPS green sturgeon.

Aggregated Effects

The effects of the proposed action are likely to result in temporary changes to physical and biological attributes of critical habitat for listed salmonids and southern DPS green sturgeon such as increased turbidity during potholing and cofferdam installation/removal and decreased availability of benthic organisms during the construction process. Though these changes are reasonably likely to occur, they will occur at different times throughout the action and will not have aggregated impacts to critical habitat.

Effects to Salmon and Steelhead Individuals

Humboldt Bay serves as a potential salmonid migration corridor to spawning tributaries such as the Elk River, and Freshwater, Jacoby, and Salmon Creeks. Humboldt Bay also provides feeding habitat for out migrating juveniles. Both out migrating and rearing salmon and steelhead smolts may be passing through Humboldt Bay between January and mid-September (Wallace 2006, 2007; Wallace and Allen 2007). Tagging studies of out migrating coho salmon smolts from Freshwater Creek show that the smolts move with the tide in both the deep channel and the channel margins of Humboldt Bay (Pinnix *et al.* 2008). CC Chinook salmon and NC Steelhead smolts are likely to share similar out migration characteristics.

Hydroacoustic Effects

Installation of the cofferdam requires small diameter rods to be inserted in the intertidal mudflats. The driving of rods will be conducted using low impact methods such as hand tools. In addition, the installation will take place during a low tide and outside of the water table. This will ensure that sound will not be transferred through the water avoiding any hydroacoustic impacts to salmonids. Therefore, the hydroacoustic impacts of the cofferdam installation will have discountable effects.

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Temporary Loss of Habitat

Once the tide gate and outfall pipe have been located, a cofferdam will be installed around the perimeter of the construction area. Installing the cofferdam during an outgoing low tide minimizes the exposure of juvenile salmonids by preventing their access to the construction area. The cofferdam will be installed within salmon and steelhead habitat for as long as five days, resulting in a temporary reduction in habitat during the tidegate installation. However, the loss of habitat comprises less than one thousandth of a percent of the total area of Humboldt Bay (SHN, Inc., 2014). Based on the small scale of the tide gate work area, 650 square feet (0.015 acres), and the availability of suitable migration corridors and feeding habitat elsewhere in Humboldt Bay, the exclusion of salmon and steelhead from the work area the effects on listed salmonids is discountable.

Turbidity

Sediment will likely become suspended and create turbid waters during the potholing activities as well as the installation and removal of the cofferdam. The increase of sediment could reduce the ability of salmon and steelhead to see prey within the action area. The cofferdam installation process will occur during an outgoing low tide which minimizes the amount of sediment entering the Bay. In addition, the cofferdam will also confine suspended solids within the work area which will limit the transmission of sediment into Humboldt Bay. During the first high tide after removal of the cofferdam, it is expected that project-related sediment would become suspended and cause a temporary increase in turbidity that could extend as far as a few hundred meters (SHN 2014). Coarse suspended sediment and fine sediment, which coalesce to form aggregates, settle relatively quickly upon entering the waters resulting in a rapid decrease of sediment concentrations from the work area (Barnard, 1978). Studies involving dredge-induced turbidity found that sediment is expected to settle within several hours and travel no farther than 1,000 meters from the source (SHN, Inc., 2014). Tidal dissipation of suspended sediment is expected to occur due to the close proximity of the relatively deep Eureka Channel and the semi-diurnal tides of Humboldt Bay (Swanson et al., 2012). Due to the relatively small work area, turbidity is expected to spread a maximum of a few hundred meters from the project area (SHN, Inc., 2014). Tidal transport and diffusion is expected to eliminate the increased turbidity in less than one hour. The short time frame of increased turbidity and the amount of suitable habitat elsewhere in Humboldt Bay will not affect the fitness or feeding opportunities of salmonids (Swanson, et al., 2012). Therefore, the effects of turbidity on salmon and steelhead individuals is discountable.

Direct Crushing

Potholing to locate the outfall pipe and tide gate will begin in the upland area outside of the intertidal zone of the Bay. It may be necessary to extend the potholing into the intertidal area during an outgoing low tide. Performing this action during an outgoing low tide will significantly reduce the possibility that salmon and steelhead may be present where potholing will be conducted (the area affected by potholing will be dry). Therefore, the risk of crushing associated with potholing in the intertidal zone is not likely to occur, and thus would have a discountable effect on listed salmonids.

Aggregated Effects

Effects of the project will occur at different times throughout the duration of the project. Turbidity increases resulting from potholing will not occur at the same time as the turbidity created during the installation and removal of the cofferdam. Furthermore, all actions will take

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place during low tide or within the confines of a cofferdam to avoid potential crushing of individuals and to minimize turbidity during construction. Therefore, the proposed activities individually and collectively may affect, but are not likely to adversely effect listed salmon and steelhead.

Effects on North American Green Sturgeon Individuals

Adult Southern DPS green sturgeons are known to use Humboldt Bay as adult foraging habitat. USFWS has detected acoustic-tagged green sturgeon in Humboldt Bay which had migrated from Willapa Bay, Rogue River, Columbia River, and Gray's Harbor (Lindley *et al.*, 2011). Acoustic telemetry has been used to detect 30 tagged green sturgeon in Humboldt Bay from 2006-2007. Data indicated that 92 percent of the detections of green sturgeon occurred in Arcata Bay (Pinnix, 2008). None of the detections have been near the channel edges of the work area or the Eureka water front (SHN, Inc., 2014). Because green sturgeon have never been detected along the channel edges near the work area, it is likely that sturgeon will not be exposed to the impacts of the project. Therefore, the project activities are expected to have a discountable effect on green sturgeon individuals.

Conclusion

Based on this analysis, NMFS concurs with the Corps that the proposed action may affect, but is not likely to adversely affect SONCC coho salmon, CC Chinook salmon, NC Steelhead, and Southern DPS green sturgeon as well as the aforementioned species' designated critical habitats.

Reinitiation of Consultation

Reinitiation of consultation is required and shall be requested by the Corps or by NMFS, where discretionary Federal involvement or control over the action has been retained or is authorized by law and (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (2) the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this concurrence letter; or if (3) a new species is listed or critical habitat designated that may be affected by the identified action (50 CFR 402.16). This concludes the ESA portion of this consultation.

MAGNUSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

Under the MSA, this consultation is intended to promote the protection, conservation and enhancement of EFH as necessary to support sustainable fisheries and the managed species' contribution to a healthy ecosystem. For the purposes of the MSA, EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity", and includes the associated physical, chemical, and biological properties that are used by fish (50 CFR 600.10), and "adverse effect" means any impact which reduces either the quality or quantity of EFH (50 CFR 600.910(a)). Adverse effects may include direct, indirect, site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

NMFS determined the proposed action would adversely affect EFH as follows: (1) temporary increase in turbidity created by potholing and cofferdam installation/removal; and (2) temporary loss of benthic invertebrates within the work area due to disturbance from construction.

The Proposed Action section identifies BMPs which will minimize the potential adverse effects to EFH to the extent practicable. The listed avoidance, minimization, and mitigation measures are adequate in offsetting and minimizing and adverse effects to EFH. Therefore, NMFS has no additional conservation recommendations for the proposed action.

Section 7(a) (1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of threatened and endangered species. The Corps also has the same responsibilities, and informal consultation offers action agencies an opportunity to address their conservation responsibilities under section 7(a) (1)."

Please direct questions regarding this letter to Mr. Mitch Markey, at (707) 825-1620 or via email at mitch.markey@noaa.gov.

Sincerely bar

William W. Stelle, Jr. Regional Administrator

cc: Carol Heidsiek, Corps of Engineers, San Francisco District, Eureka, CA

bcc: CHRON File (pdf) Division- File copy

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