STATE OF CALIFORNIA – THE RESOURCES AGENCY ARNOLD SCHWARZENEGGER, *GOVERNOR*

CALIFORNIA COASTAL COMMISSION

NORTH COAST DISTRICT OFFICE
710 E STREET • SUITE 200
EUREKA, CA 95501-1865
VOICE (707) 445-7833
FACSIMILE (707) 445-7877

MAILING ADDRESS:
P. O. BOX 4908
EUREKA, CA 95502-4908

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Commission Action:	

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:	**1-05-016**
APPLICANT:	**Chevron Products Company**
PROJECT LOCATION:	Within and on properties surrounding the Eureka Marine Terminal and Tank Farm, 3400 Christie Street, Eureka, Humboldt County. APNs 7-071-08, & -013 (replacement wells site), 7-081-13, -30, & -31, and 7-130-05 & -13.
PROJECT DESCRIPTION:	1) After-the-fact authorization for the installation of 22 water quality monitoring wells within the marine terminal / tank farm complex and on adjoining properties; and 2) replace three monitoring wells in the intertidal area adjacent to the terminal premises.
LOCAL APPROVALS RECEIVED:	Humboldt Bay Harbor, Recreation, and Conservation District Permit No. 05-05.
OTHER APPROVALS RECEIVED:	1) U.S. Army Corps of Engineers FCWA Section 404 Nationwide Permit No. 6 – Survey Activities; and 2) State Water Resources Control Board FCWA Section 401 Waste Quality Programmatic Certification of USACOE Nationwide Permit No. 6.
OTHER APPROVALS REQUIRED:	None.

SUBSTANTIVE FILE DOCUMENTS:	City of Eureka Local Coastal Program; Geo-probe Boring Logs (SHN Consulting Engineers, 8/22/00) and Analytical Laboratory Results (Kiff Analytical, LLC, 9/13/00 and North Coast Laboratories, Ltd., 12/8/00).

SUMMARY OF STAFF RECOMMENDATION

Staff recommends that the Commission approve with conditions the proposed hazardous materials remediation monitoring project for an upland site adjacent to the coastal waters of Humboldt Bay. The applicant seeks authorization for: (1) the previous installation of 22 groundwater monitoring wells placed without a coastal development permit over the period of 1983 through 2002; and (2) installation of three additional groundwater monitoring wells to replace three of the 22 existing wells that have become sanded-in and are no longer usable. The project site is located within the upper tideland reaches of Humboldt Bay and previously filled tidelands that are potentially subject to public trust and is thus located within the Commission's permit jurisdiction.

The proposed remediation project is located in close proximity to coastal waters. The primary need for the project is to provide water chemistry data towards abating the continued pollution of soils, groundwater, and possibly coastal waters from petroleum fuel compounds that have either leaked from underground storage tanks or have been spilled during the offloading and transferring of fuel and lubricant products within the Chevron Products Company's marine terminal and tank farm facility adjacent to Humboldt Bay. Although the exact extent of the contamination has not been yet determined, it is estimated that a contamination plume extends to a depth of five to six feet below the ground surface.

Although the overall intent of the project is to assess the extent of the spread of contaminants, if not carefully conducted the project could result in additional releases of hazardous materials. If not properly scheduled, tidal water could enter the excavations and co-mingle with contaminated soils. The introduction of tidal water could aggravate clean-up efforts and possibly result in an increased discharge of pollutants into coastal waters. In addition, if the excavated materials are not promptly removed to an appropriate disposal storage and/or location, decommissioning the malfunctioning monitoring wells and installation of the replacement wells could result in similar releases into surrounding environmentally sensitive areas.

These risks of accidental releases would be minimized by the use of development timing, prompt removal of extracted contaminated materials to upland storage or disposal sites, avoiding the use of motorized heavy excavation equipment within environmentally sensitive areas, and other best management practices (BMPs) incorporated within the project design and/or as required by the Regional Water Quality Control Board

(RWQCB) or its Local Enforcement Agency (LEA), the County of Humboldt Department of Public Health's Division of Environmental Health. In addition, the abatement work would be conducted pursuant to an approved workplan, supervised by a licensed hazardous materials operator, with direct oversight by the LEA to ensure that effects to marine resources and public health & safety are minimized. Staff recommends that a condition be attached to the coastal development permit requiring the applicant to undertake the project consistent with these proposed BMPs to minimize the risks of incidental releases of hazardous materials into coastal waters. In addition, conditions requiring other construction performance standards for preventing the release of construction debris into Humboldt Bay are recommended. Finally, as portions of the project have been completed without benefit of a necessary coastal development permit, the staff recommendation includes a condition requiring compliance within 60 days of all of the other conditions that the applicant is required to satisfy prior to issuance of this permit to ensure the project is brought into permit compliance in a timely manner.

Staff believes the proposed project as conditioned is consistent with the Chapter 3 policies of the Coastal Act. The motion to adopt the Staff Recommendation of Approval with Conditions is found on pages 3 through 4.

STAFF NOTES

1. Jurisdiction and Standard of Review.

The proposed project is located within the incorporated boundaries of the City of Eureka within the City's coastal-dependent industrial waterfront area built on reclaimed saltmarsh lands adjoining Humboldt Bay in Humboldt County. Although the City of Eureka has a certified LCP and title to the submerged and intertidal areas within the bay have been granted to the Humboldt Bay Harbor, Conservation, and Recreation District, the project site is partially within tidelands. Therefore, the development is within the Commission's retained coastal development permit jurisdiction and the standard of review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

I. MOTION, STAFF RECOMMENDATION, AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

Motion:

I move that the Commission approve Coastal Development Permit No. 1-05-016 pursuant to the staff recommendation.

Staff Recommendation of Approval:

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

Resolution to Approve Permit:

The Commission hereby approves a coastal development permit for the proposed development 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: See attached.

III. SPECIAL CONDITIONS:

1. Permit Expiration and Condition Compliance

Because some of the proposed development has already commenced, this coastal development permit shall be deemed issued upon the Commission's approval and will not expire. Failure to comply with the special conditions of this permit may result in the institution of an action to enforce those conditions under the provisions of Chapter 9 of the Coastal Act.

2. State Lands Commission Review

WITHIN 60 DAYS OF COMMISSION ACTION ON THIS CDP APPLICATION, or within such additional time as the Executive Director may grant for good cause, the applicant shall submit to the Executive Director a written determination from the State Lands Commission that:

a. No State lands are involved in the development; or

b. State lands are involved in the development and all permits required by the State Lands Commission have been obtained; or

c. State lands may be involved in the development, but pending a final determination an agreement has been made with the State Lands Commission for the project to proceed without prejudice to that determination.

3. Construction Responsibilities and Debris Removal.

The permittee shall comply with the following construction-related requirements:

(a) No construction materials, debris, or waste shall be placed or stored where it may be subject to entering waters of Humboldt Bay;
(b) Fuels, lubricants, and solvents shall not be allowed to enter the waters of Humboldt Bay. Hazardous materials management equipment including oil containment booms and absorbent pads shall be available immediately on-hand at the project site. All heavy equipment operating in or near the water's edge shall utilize vegetable oil as hydraulic fluid;
(c) Any releases of hazardous materials shall be immediately contained, removed from the work area, and disposed of at an appropriate disposal facility. The Department of Fish and Game's Office of Spill Prevention and Response, the U.S. Coast Guard, the Humboldt County Department of Public Health's Division of Environmental Health, the North Coast Regional Water Quality Control Board, and the Coastal Commission shall be immediately notified of any spill that occurs at the project site; and
(d) Any and all excavation material resulting from groundwater monitoring well installation and decommissioning activities shall be deposited at an off-site authorized disposal location following their temporary retention onsite in USDOT-approved hazardous materials storage and transport vessels for contaminant compositional testing purposes.

4. Implementation of Water Quality Pollution Prevention Best Management Practices

The development shall be performed consistent with the Water Quality Pollution Prevention Best Management Practices as set forth in the Application for Water Quality Certification developed by Winzler and Kelly Consulting Engineers, dated April 8, 2005, as contained on pages 17 and 18 of Exhibit No. 7 of this staff report.

IV. FINDINGS AND DECLARATIONS.

A. Site Description.

The petroleum spill remediation project site is located approximately ¼ mile west of Highway 101 along the margins of Humboldt Bay within the City of Eureka's Westside Industrial Area (see Exhibit Nos. 1 and 2). The overall project site consists of the nearly 4-acre area comprising Chevron Products Company's Eureka Marine Terminal and Tank Farm, along with selected sites within the terminal complex and on adjoining properties (see Exhibit No. 4).

The project site for replacement of the three the groundwater monitoring wells consists of an approximately 10-foot-wide by 100-foot-long area within the upper intertidal band of mudflat along the bay frontage of the terminal. The monitoring wells are located along a line perpendicular from the base of the pier, directly west of and paralleling a concrete headwall. The wells are approximately one to two feet from the headwall. A line of steel posts approximately eight inches in diameter and 4.5 feet in height above ground surface, parallel the concrete headwall at a distance of approximately three to five feet. A riprap barrier composed of a wall of large boulders parallels the concrete head wall at a distance of approximately 20 to 25 feet. Eelgrass (Zostera marina) beds, observable from the pier between the dock and the shoreline, are located approximately 40 feet from the concrete headwall (and approximately 15 to 20 feet bayward from the rip rap barrier). The rip rap and steel posts are located between the project area and the eelgrass beds which, are identified to be an Environmentally Sensitive Habitat Area (ESHA) in the City of Eureka's Local Coastal Plan.

The marine terminal, as well as much of Eureka's industrial waterfront, was constructed on fill in a reclaimed portion of Humboldt Bay in the 1940's. There are numerous coastal access and recreational amenities for hiking, cycling, bird-watching, and boating in the project vicinity, including the Elk River Wildlife Area, the Truesdale Vista Point, the Eureka Slough Restoration Project, the Del Norte Street Fishing Pier, and numerous other informal trails and accessway segments on public lands behind the Bayshore Mall and along the shoreline between Truesdale Street and Hilfiker Lane. The project site has a Waterfront Development (WD) land use and zoning designation.

The majority of the project site is situated on a coastal plain remnant that has been graded flat at an elevation of between +5 and +12 feet above mean lower low water (MLLW) as referenced from the 1988 North American Vertical Datum ($NAVD_{88}$). The ground surface elevation at the sites of the three monitoring wells proposed for replacement (MW-10, -11, and -12) is +8.0 feet, +9.6 feet, and +6.5 feet above MLLW, respectively. By comparison, the mean high tide line for Humboldt Bay is +6.15 above MLLW.

The terminal complex houses a variety of fuel barge offloading, storage, and trans-shipping functions operated by the Chevron Products Company, one of three bulk fuel depot operators on Humboldt Bay. The marine terminal and tank farm facility is constructed on filled former intertidal areas subject to the authority of the State Lands Commission's Marine Facilities Division. Six of the existing monitoring wells and the

sites of the three proposed replacement wells are located on tidelands subject to the Commission's permitting jurisdiction. The more inland portions of the project site containing the other 16 well locations constitute reclaimed former tidelands of Humboldt Bay where the Commission has delegated original permit jurisdiction to the City of Eureka for areas that are potentially subject to the public trust, but which are filled, developed, and committed to urban uses pursuant ti Section 30613 of the Coastal Act.

B. Project Description.

The portion of the proposed project within the Commission's jurisdiction consists of the: (1) the previous installation without a coastal development permit of six groundwater monitoring wells within the upper intertidal reaches along the terminal's bay frontage; and (2) decommissioning and replacement of three sanded-in wells located within this area (see Exhibit No. 4).

Initial Placement of Groundwater Monitoring Wells

To monitor the effectiveness of ongoing leaking underground storage tank clean-up efforts, 22 water-sampling wells were installed without requisite coastal development permits between 1983 and 2002, pursuant to a hazardous spill monitoring plan approved by the North Coast Regional Water Quality Control Board (NCRWQCB). The monitoring wells consist of lengths of polyvinylchloride (PVC) piping, two to four inches in diameter, installed within 6- to 8¼-inch-diameter hollow-stem auger holes drilled to a depth of between five to ten feet below the ground surface (see Exhibit No. 5). The monitoring wells are sheathed in #3 or #2/12 sand filter packing and sealed with a ½-foot-thick layer of hydrated bentonite, and set in place with a cement-bentonite grout plug. The piping is perforated with 0.02-inch0wide slots at depths from one to five feet below ground surface to allow groundwater to enter the sampling gallery. Groundwater sampling is conducted quarter-annually. Use of three of the existing 22 wells (MW-1, -2, and -14) have since been discontinued and the wells "abandoned" in place. Abandonment consists of over-boring the well and casing to its full installed depth and backfilling the bore with a Portland cement grout mixture to prevent the venting and piping of contaminants up to the ground surface through the well bore.

Decommissioning and Replacement Wells

Six of the remaining 19 monitoring wells are situated along the terminal's bay frontage with Humboldt Bay. Three of these wells (MW-10, -11, and -12) have become sanded-in and are no longer operable for taking water samples. The well replacement portion of the project is proposed in response to a request by the California Regional Water Quality Control Board (CRWQCB) as part of the ongoing above-ground storage tank monitoring project at the site.

The proposed replacement monitoring wells would be drilled within three feet of existing monitoring wells MW-10, -11, and -12. Well construction entails drilling to a total depth

of 15.0 feet below ground surface (bgs) with an eight-inch-diameter hollow stem auger and installing two-inch-inside diameter PVC pipe from total depth to 3.0 feet ags. Fill space surrounding the pipe would be backfilled with sand from 5.0 feet to 15.0 feet bgs, sealed with bentonite from 4.0 feet to 5.0 feet bgs, and topped with neat Portland cement from ground surface to 4.0 feet bgs (Figure 4). The wells will be screened with 0.02 inch slots from 5.0 feet to 15.0 feet bgs.

Monitoring wells MW-10, MW-11, and MW-12, are proposed for destruction by over-drilling to their entire installed depth by a California Certified Drilling Company, and by grouting the borings to the surface with "neat" Portland cement. The existing monitoring wells consist of three-inch-inside-diameter PVC pipe installed from a depth of 5.0 feet bgs to 3.0 feet above ground surface (ags), a total of approximately eight feet of pipe.

Drilling of the replacement wells and decommissioning over-drilling would be performed using an approximately 500-pound portable auger rig. The auger rig shall be carried to each drill location in separate components and assembled over each hole on top of a plywood mud box which would serve to confine the drill cuttings and support the weight of the drill rig. Two hydraulic hoses would be extended along the shoreline adjacent to the seawall from a hydraulic pump mounted on a 5-foot-wide by 10-foot-long trailer. The trailer-mounted hydraulic pump will be staged at an upland location on the parcel, on an asphalt surface. One hydraulic hose transports hydraulic fluid to the portable auger rig to turn the auger, the other hydraulic hose transports the heated fluid back to the hydraulic pump for cooling and reuse.

The drilling would be performed during low tide cycles, at times when soil disruption caused by the drilling would not come in contact with bay waters. The applicant's agent does not anticipate any project-influenced turbidity to enter Humboldt Bay as a result of the project work. Similarly, impacts to the shoreline would be minimal as no vehicular traffic will be required to reach the wells. In addition to the hydraulic-powered portable auger, other equipment and supplies used for drilling and well installation includes: bags of sand, bentonite, and cement, a wheelbarrow, and shovels. These materials would be staged temporarily in the immediate vicinity of the monitoring wells while the work is being undertaken. Approximately three persons at a time would be working in the vicinity of the wells. Hours of operation would be maximized at low tide; work is estimated for completion within three to four days. Coffer damming and de-watering of the site would not be necessary.

Drill cuttings would be shoveled in to a wheelbarrow and transported directly to a 55-gallon U.S. Department of Transportation-approved storage drum, which would then be tightly sealed and stored at an upland location on the marine terminal parcel. Samples from the drums would be collected and submitted for laboratory analysis in order to profile the cuttings for subsequent disposal at appropriate disposal facilities. No stockpiling of the excavated materials is proposed.

C. Protection of Coastal Wetlands and Water Quality.

Section 30230 of the Coastal Act states, in applicable part:

> *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 addresses the protection of coastal water quality in conjunction with development and other land use activities. Section 30231 reads:

> *The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of wastewater discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantially interference with the surface water flow, encouraging, wastewater reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.*

Section 30233 of the Coastal Act provides as follows, in applicable part:

> *(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible[1] 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...*
>
> *(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary...* [Emphases added.]

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[1] "Feasible" is defined by Section 30108 of the Coastal Act as, "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors."

The above policies set forth a number of different limitations on what development projects may be allowed in coastal wetlands. For analysis purposes, the limitations can be grouped into four general categories or tests. These tests are:

- The purpose of the filling, diking, or dredging is for one of the uses enumerated in Section 30233(a);
- The project has no feasible less environmentally damaging alternative;
- Feasible mitigation measures have been provided to minimize adverse environmental effects; and
- The biological productivity and functional capacity of the habitat shall be maintained and enhanced where feasible.

1. Permissible Use for Fill

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). Among the allowable uses, the use which most closely match the project objectives are enumerated in Section 30233(a)(1) involving dredging, diking, and/or fill for "*new or expanded port, energy, and coastal dependent industrial facilities.*"

The construction of the proposed monitoring wells is being proposed in the interest of the water quality of the Humboldt Bay area consistent with state and federal standards. Although the development would not expand or otherwise enhance the marine terminal and tank farm storage or break-in-bulk processing capacities, it would serve to stabilize and protect the effects the project site has on surrounding coastal resources by providing facilities for the on-going monitoring and assessment of groundwater contamination originating at the facility. Accordingly, the purpose of the fill and dredging for installation of the groundwater monitoring wells is for "*new or expanded port, energy, or coastal dependent industrial facilities.*"

Therefore, the Commission finds that the filling for the shoreline revetment structure is not for one of the allowable uses for dredging, diking, and filling of coastal waters pursuant to Section 30233(a)(1) of the Coastal Act.

2. Least Environmentally Damaging Feasible Alternative

The second test of Section 30233(a) is whether there are feasible less environmentally damaging alternatives to the proposed project. In this case, the Commission has considered project options, and determines that there are no feasible less environmentally damaging alternatives to the project as conditioned. Alternatives that have been

identified include: (1) relocating the proposed replacement monitoring wells to other upland locations; and (2) the "no project" alternative.

a. Relocating the Monitoring Well Proposed in a Wetland to an Upland Area

The three replacement monitoring wells are proposed to be located within the supratidal wetlands along the marine terminal frontage with Humboldt Bay. The wells may need to remain in place permanently to allow for ongoing monitoring of groundwater for residual contamination. Relocating these proposed wells to an upland location would avoid the wetland impacts associated with installation of the wells. However, relocating the well is not feasible. Siting the well in an upland location would not meet the objectives for constructing the monitoring wells, to provide a sampling point for the movement of contaminants in groundwater and to assess the efficacy of clean-up actions. The site for the proposed monitoring wells were chosen because they lies in an area hydrologically down-gradient from the marine terminal/tank farm where entrained contaminants, if any, would likely migrate. Accordingly, the intrinsic purpose for the monitoring well would be undermined if so relocated to an area where surface and subsurface movement of water from the petroleum products receiving and storage facility does not flow. Thus, this alternative is not a feasible less environmentally damaging alternative.

b. No Project Alternative

The "no project" alternative would leave the area in and around the marine terminal and tank farm in their current contaminated condition with no further corrective action being taken with respect to monitoring the fuel spills. Such non-action would be in violation of federal and state water quality laws and related environmental protection regulations. In addition, spill remediation work already performed without benefit of a permit, the installation of the other 22 groundwater monitoring wells, has already been undertaken. The no project alternative would not address the issue of the alleged unpermitted development. Therefore the no project alternative is not a feasible less environmentally damaging alternative as it would leave spilled hazardous materials in place within the environment and would not provide for after-the-fact legitimization of the development that has already been undertaken without permits.

Based on the alternatives analysis above, the Commission concludes that there are no feasible less environmentally damaging feasible alternatives to the proposed project as conditioned.

3. Feasible Mitigation Measures

The third test set forth by Section 30230 and 30233 is whether feasible mitigation measures have been provided to minimize significant adverse environmental impacts, including but not limited to the quality of coastal waters.

The proposed project could have three potential adverse effects on the environment of Humboldt Bay surroundings. The project could have potential adverse impacts to: (a) muddy intertidal marine wetlands from installation of the replacement wells and decommissioning of the sanded-in wells; (b) the estuarine water quality from the release of excavated, potentially contaminated muddy materials into the tidal waters of Humboldt Bay; (c) marine water quality from the accidental release of hazardous materials associated with the hydraulic-powered construction equipment. The potential adverse impacts and their mitigation are discussed in the following sections:

a. Loss of Intertidal Mudflat Marine Wetlands

As detailed in Project Description Findings Section IV.A, the project would result in the excavation and fill of approximately two-square feet of intertidal mudflat wetlands consisting of the site of the three replacement wells, the three existing malfunctioning monitoring wells to be destroyed, and the three other functioning wells. The other 16 wells previously installed were installed within upland areas outside of the Commission's jurisdiction. Vegetation within a five-foot radius of monitoring wells MW-10 and MW-12, the two wells lowest in elevation and most tidally influenced, consists only of cord grass (Spartina densiflorus), in approximately 20 percent and 15 percent cover, at each respective monitoring well. Vegetation within a five-foot radius of monitoring well MW-11 consists of 100 percent cover including dense-flowered cordgrass (Spartina densiflora), beach grass (Ammophila arenaria), American dune grass (Leymus mollis), sheep sorrel (Rumex acetosella), common vetch (Vicia sativa), smooth cat's ear (Hypochaeris glabra), and salt bush (Atriplex patula). The species within the immediate project area are non-native weedy species, commonly found in disturbed areas with the exception of salt bush, which was noted to exist as 3 percent (%) cover. The locations of the three replacement wells, the three existing malfunctioning monitoring wells to be destroyed, and the three other functioning wells are only periodically inundated during the more intense high tides. Nonetheless, notwithstanding these locations elevations relative to the mean high tide datum, the sparsity of vegetation and/or the nominal habitat these sites afford, the subject area would meet the Commission's definition of "wetlands."[2]

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[2] Refer to U.S. Fish and Wildlife Service - Office of Biological Services' Publication No. FWS/OBS-79/31 "Classification of Wetlands and Deepwater Habitats of the United States" (Lewis M. Cowardin, et al, USGPO December 1979) for a further discussion of the definition of the extent of marine wetland habitats.

The community of organisms that inhabit the bayfront project area, though low in density, would be lost as a result of the construction of the. However, as the extent of the replacement and decommissioned well sites comprises a total of only two square feet within the thousands of acres of mudflat within Humboldt Bay, the Commission finds that the impact to muddy intertidal marine wetlands is not significant and no additional mitigation is necessary for the loss of intertidal mudflat marine wetland habitat associated with the proposed project.

b. Estuarine and Marine Water Quality

Another potential environmental impact associated with the proposed development is the degradation of estuarine and marine water quality from the release of possibly contaminated muddy materials excavated during the installation and removal of the groundwater monitoring wells within the intertidal reach. If the work is not properly scheduled and expeditiously performed these muddy materials can become entrained in bay waters that would inundate this portion of the project site during the high tide cycle.

To minimize the potential for these impacts to occur, the applicant proposes to employ the following water quality best management practices (BMP's):

- The auger rig shall be carried to each drill location in separate components and assembled over each hole on top of a plywood mud box, which will confine the drill cuttings and support the weight of the drill rig.
- Drill cuttings will be shoveled in to a wheelbarrow and transported directly to a 55-gallon DOT storage drum, which will then be tightly sealed and stored on the upland Marine Terminal parcel. Samples from the drums will be collected and submitted for laboratory analysis in order to profile the cuttings for disposal to appropriate disposal facilities. No stockpiling will occur.
- The drilling shall be performed during low tide, at a time when soil disruption caused by drilling will not come in contact with bay water. No project-influenced turbidity is expected to enter Humboldt Bay as a result of this project.
- Hours of operation will be maximized at low tide and de-watering of the site will not be necessary.

To assure the protection of marine and estuarine water quality, the Commission attaches Special Condition No. 4. Special Condition No. 4 requires the applicant to perform the replacement groundwater monitoring well work consistent with the BMPs proposed by the applicant. Therefore, the Commission finds that as conditioned, the project will not result in significant adverse impacts to marine or estuarine water quality.

c. Accidental Hazardous Materials Spills

A pressurized hydraulic fluid-driven auger drilling rig would be utilized in boring the three replacement wells and in over-boring removing the three existing malfunctioning wells to be removed. These pressurized fluids would be conveyed from a compressor staged on the upland portions of the site to the drilling rig through hosing routed through the muddy intertidal ESHA. If a fitting should fail or the hose burst, pressurized hydraulic fluid could be released into the intertidal area. Such spills could adversely affect the water quality of the adjoining marine environment. Accordingly, to reduce the potential for impacts to marine environmental resources from an accidental release of hydraulic fluids, the Commission attaches Special Condition No. 3. Special Condition No. 3 requires the applicant to undertake the proposed development consistent with certain construction and debris disposal performance standards. These standards include measures for responding to hazardous material spills, specifically provisions for having an adequate supply of clean-up equipment and supplies on site, and requirements for the prompt containment and clean-up of any spills which may inadvertently occur. As conditioned, potential adverse impacts to marine resources from accidental spills of hydraulic fluids or other hazardous materials will be reduced to less-than-significant levels.

As proposed and conditioned, the Commission finds that feasible mitigation is included within the project design to minimize all significant adverse impacts associated with the proposed filling of coastal waters.

4. Maintenance and Enhancement of Marine Habitat Values

The fourth general limitation set by Section 30233 and 30231 is that any proposed filling in tidal waters or submerged land must maintain and enhance the biological productivity and functional capacity of the habitat, where feasible.

As discussed above, the project will not have significant adverse impacts on the marine resources of Humboldt Bay. The mitigation measures incorporated into the project and required by the Special Conditions discussed above will ensure that the construction of the replacement monitoring wells and decommissioning of the malfunctioning wells line would not significantly adversely affect the biological productivity and functional capacity of the tidal waters or marine resources. Furthermore, by providing functioning groundwater sampling facilities from which the movement and concentration of subsurface hazardous materials can be assessed for purposes of devising remediation response plans, the project will help protect marine aquatic habitats from being further degraded. Therefore, the Commission finds that the project, as proposed, will maintain and enhance the biological productivity and functional capacity of the habitat consistent with the requirements of Section 30233 and 30231 of the Coastal Act.

5. Conclusion

The Commission thus finds that the dredging and filling of wetlands is for an allowable purpose, that there is no feasible less environmentally damaging alternative, that feasible mitigation measures have been provided and the adverse environmental effects associated with the dredging and filling of coastal waters have been avoided or minimized, and that estuarine habitat values will be maintained or enhanced. Therefore, the Commission finds that the proposed development, as conditioned, is consistent with Sections 30230, 30231 and 30233 of the Coastal Act.

E. Public Access and Coastal Recreational Opportunities.

Coastal Act Sections 30210, 30211, and 30212 require the provision of maximum public access opportunities, with limited exceptions.

Coastal Act Section 30210 requires in applicable part that maximum public access and recreational opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Section 30211 requires in applicable part that development not interfere with the public's right of access to the sea where acquired through use (i.e., potential prescriptive rights or rights of implied dedication). Section 30212 requires in applicable part that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, such as when adequate access exists nearby or when the provision of public access would be inconsistent with public safety.

In applying Sections 30211 and 30212, the Commission is 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 public access.

The project site is located along the mid-eastern shoreline of Humboldt Bay. Within ¼ mile to the south and north of the project area are public coastal access facilities, comprising the bayside trails, coastal viewing areas, and fishing piers of the Elk River Wildlife Area, the Truesdale Vista Point, the Eureka Marsh Restoration Site, and the Del Norte Street Fishing Pier. These facilities receive heavy use by a combination of hikers, birders, recreation boaters, fishermen, and other coastal visitors.

The project as designed and sited will not result in any interference with the public's right of access to the sea as granted or accrued. Access to coastal areas through the marine terminal complex is not provided due to public safety concerns. Nonetheless, given the potential public trust status of the tidelands on which the replacement wells would be constructed, rights to pass and repass through the area exist through this portion of the project site. Although there may be temporary closures of the bay shoreline in the immediate vicinity of the replacement wells during the 3 to 4 day period of their

installation/decommissioning, these impacts are only of a temporary duration that will have no significant impact on access along this portion of Humboldt Bay. Therefore, the Commission finds that the proposed project as conditioned, which does not include substantial new public access, is consistent with the public access policies of the Coastal Act.

F. Alleged Violation.

The initial installation of the existing 22 groundwater monitoring wells was performed without benefit of a coastal development permit. The applicant's coastal development permit application seeks after-the-fact authorization for this development and additional hazardous waste remediation to be performed as part of the project. Although the monitoring well construction occurred without required authorizations, consideration of this permit application by the Commission for its removal has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of the permit does not constitute a waiver of any legal action with regard to the alleged violation, nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal permit. Special Condition No. 1 ensures that this permit vests upon issuance, and that it will not expire, as some development has already commenced.

G. State Waters.

Portions of the project site are in areas that may be subject to the public trust. Therefore, to ensure that the applicant has the necessary property interest to undertake all aspects of the project on these trust lands, the Commission attaches Special Condition No. 2, which requires that the project be reviewed and, if necessary, approved by the State Lands Commission prior to the issuance of a permit.

H. California Environmental Quality Act.

Section 13906 of the Commission's administrative regulation requires Coastal Commission approval of Coastal Development Permit 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 Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. The findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. Mitigation measures

that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no other feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

V. EXHIBITS:

1. Regional Location Map
2. Vicinity Map
3. Portion, Post LCP Certification Permit and Appeal Jurisdiction Map No. 14 – *Eureka*
4. Project Description Narrative and Groundwater Monitoring Well Location Map
5. Monitoring Well Construction Diagrams
6. Rare Plant Survey
7. Review Agency Correspondence
8. General Correspondence

APPENDIX A

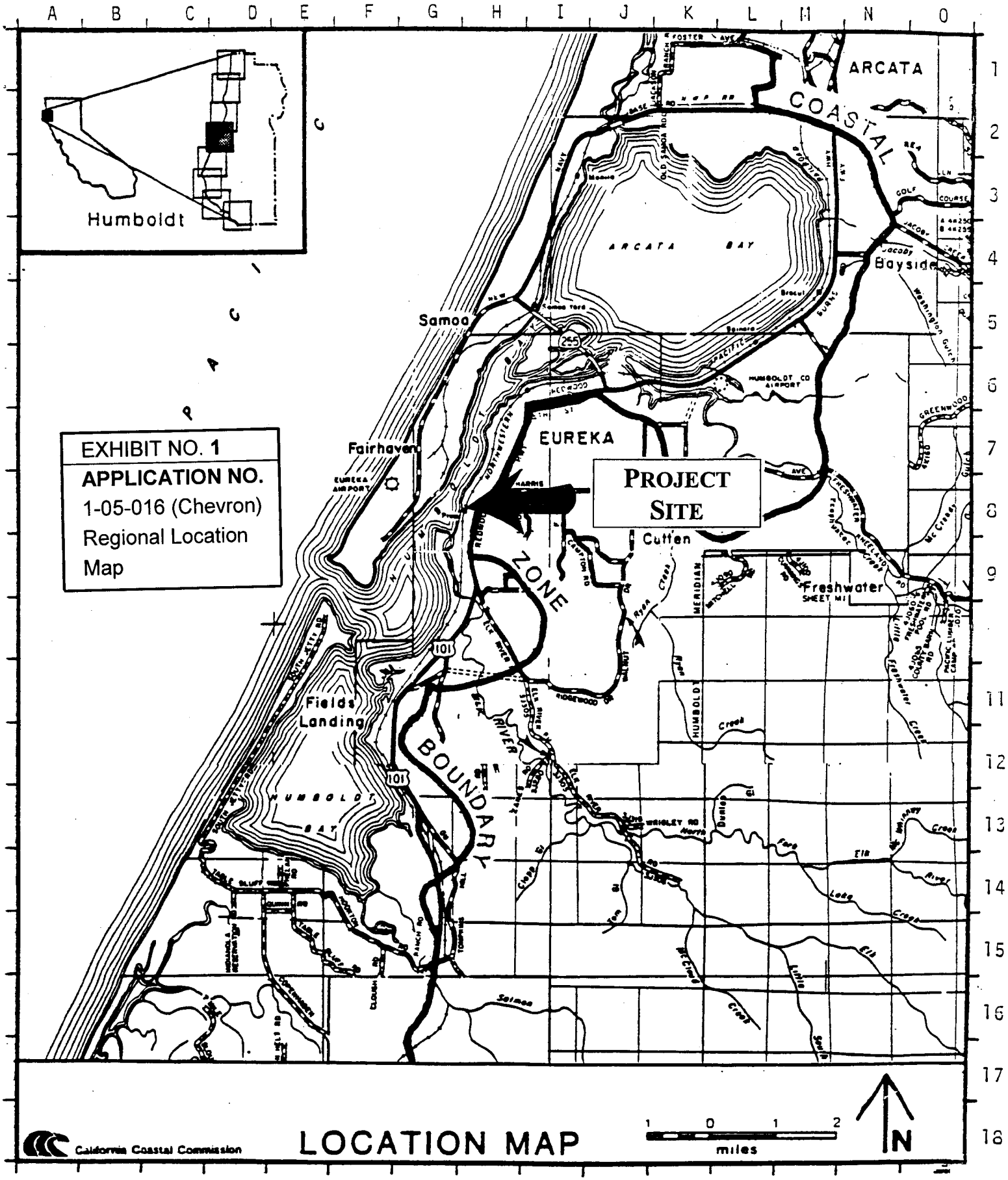
STANDARD CONDITIONS

1. Notice of Receipt and Acknowledgement. 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. Interpretation. Any questions of intent of interpretation of any condition will be resolved by the Executive Director of the Commission.

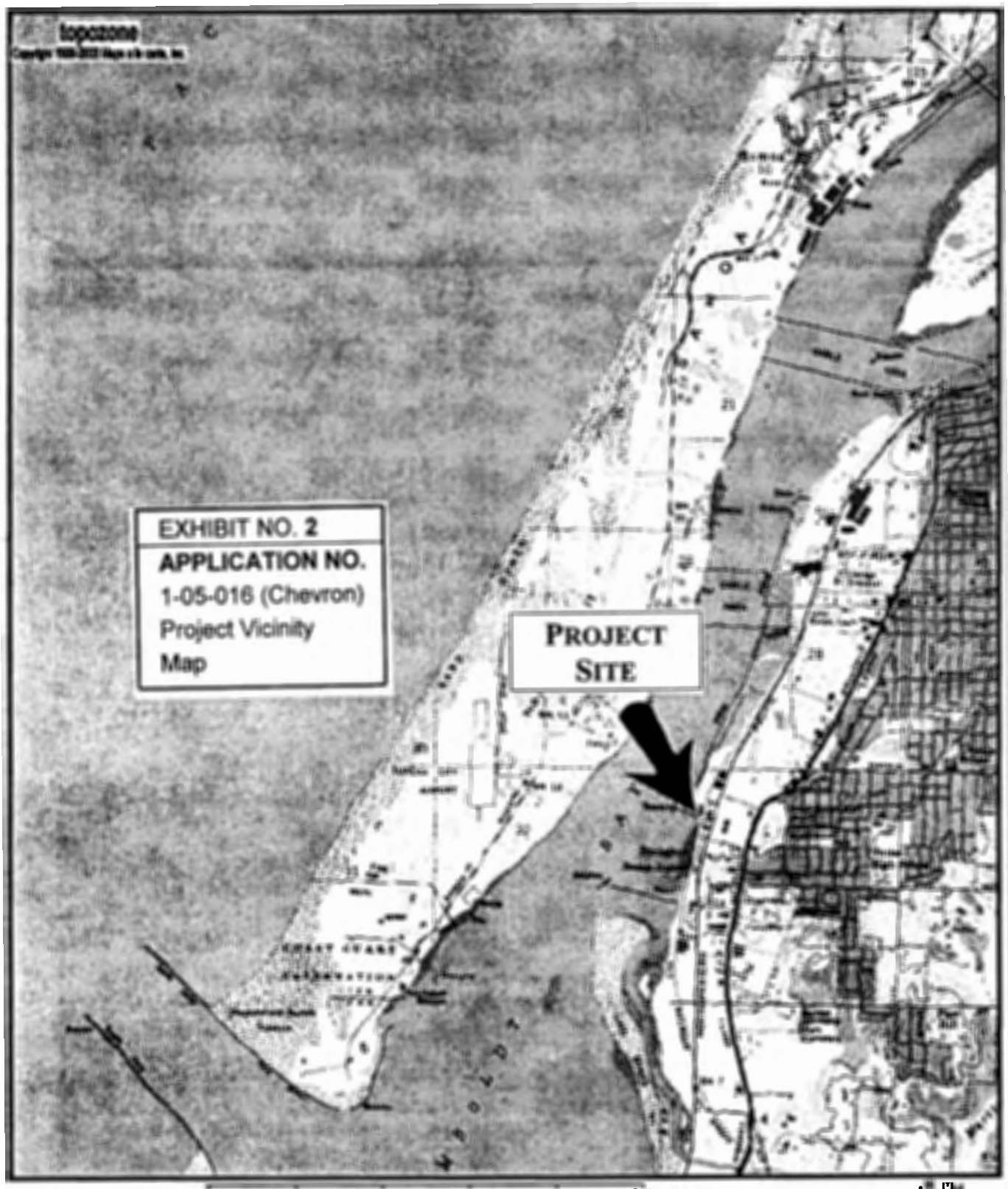
3. Assignment. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.

4. 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.



County of Humboldt

Sheet 4 of 8



Map center is UTM 10 397898E 4516261N (WGS84/NAD83)
EUREKA quadrangle
Projection is UTM Zone 10 NAD83 Datum

M=16.242
G=-0.791

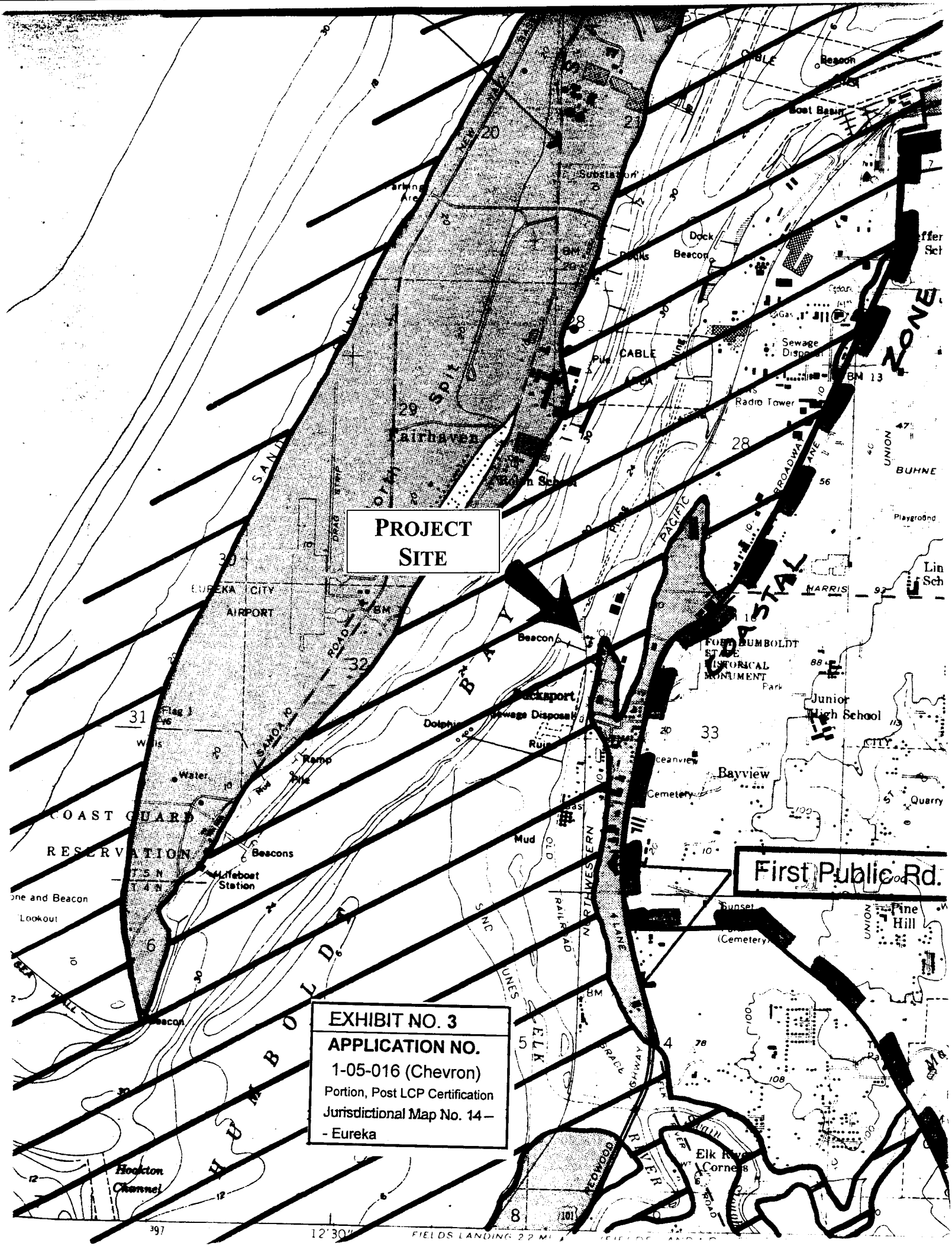

PROJECT SITE
First Public Rd.
EXHIBIT NO. 3
APPLICATION NO.
1-05-016 (Chevron)
Portion, Post LCP Certification
Jurisdictional Map No. 14 – Eureka
Fairhaven
EUREKA CITY AIRPORT
COAST GUARD RESERVATION
Bayview
Pine Hill
Junior High School
Elk River
Hookton Channel
HUMBOLDT BAY
COASTAL ZONE

EXHIBIT NO. 4
APPLICATION NO.
1-05-016 (Chevron)
Project Description Narrative, and Groundwater Monitoring Well Location Map (Page 1 of 9)

II. PROPOSED DEVELOPMENT

2. Describe proposed development in detail.

Project Location

The project is located in southwest Eureka on the edge of Humboldt Bay on Assessor Parcel (APN) numbers 007-522-071-013, zoned WD – Water Development, and APN 007-522-071-008, zoned MC – Coastal Dependant Industrial. These parcels are located southwest of the Bayshore Mall, behind Ray's Food Place.

Project Purpose

The purpose of the proposed project is to install wells which will provide groundwater samples for collection for analysis of petroleum products in order to monitor groundwater conditions as part of an above ground storage tank (AST) project. At present, the monitoring wells, drilled to a depth of 5 feet bgs do not provide groundwater for collection of samples. The proposed monitoring wells, to be drilled to a depth of 15 feet bgs, are expected to provide the groundwater samples necessary for quarterly monitoring. This well replacement project is proposed in response to a request by the California Regional Water Quality Control Board (CRWQCB) as part of an ongoing AST monitoring project at the site. Quarterly monitoring samples will be submitted for laboratory analysis and results will be reported to the CRWQCB. In the process of permitting the three replacement wells described above, permitting of the remaining existing monitoring wells is also requested. Please see the project description below for further discussion.

Existing Facility

The existing facility (APN 071-007-008) consists of a tank farm facility consisting of several large above ground petroleum tanks, a warehouse, an office, and a fueling station. The marine terminal facility (APN 071-007-013) consists of a pier and loading dock.

Project Description

Replacement of three monitoring wells is proposed for an area on APN 007-071-013 adjacent to the existing Chevron Marine Terminal (APN 007-071-008), as shown in the vicinity map (Figure 1), plan view (Figure 2), site plan (Figure 3), and cross section view (Figure 4). The three monitoring wells (MW-10, MW-11, and MW-12) proposed for replacement were installed on December 8, 1983 as part of a 22 monitoring well Above Storage Tank (AST) investigation regulated by the Regional Water Quality Control Board (RWQCB). The RWQCB requested MW-10, MW-11, and MW-12, currently bored to a depth of approximately 5 feet below ground surface (bgs), be drilled deeper, to a depth where collection of groundwater samples is obtainable. Proposed depth of the three monitoring wells for replacement is 15 feet bgs, to be drilled within 3 feet of existing monitoring wells MW-10, MW-11, and MW-12.

It is requested that the remaining existing site monitoring wells be permitted under this permit application for the California Coastal Commission (CCC). The Chevron AST investigation includes a total of 22 existing monitoring wells that have not previously been

permitted by the CCC. Fourteen (14) site monitoring wells were installed from 1983 to 2002. The wells were installed in depths ranging from 5 to 30 feet bgs. Three of these wells have since been abandoned. Please see Table 1 at the end of this text for well construction details.

Monitoring wells MW-10, MW-11, and MW-12, are proposed for destruction by over-drilling to their entire depth by a California Certified Drilling Company, and by grouting the borings to the surface with neat Portland cement. Existing well construction consists of a 3 inch inside diameter PVC pipe installed from a depth of 5.0 feet bgs to 3.0 feet above ground surface (ags), a total of approximately 8 feet of pipe. Ground surface elevation, as measured during a site visit in February 2005, at monitoring wells MW-10, MW-11, and MW-12 was 8.0 feet, 9.6 feet, and 6.5 feet above mean lower low water (MLLW), respectively. The wells were installed with a 6 inch diameter hollow stem auger. Fill space around the outside of the pipe consists of a sand pack from approximately 1.0 foot bgs to 6.0 feet bgs, a bentonite seal from 0.5 feet bgs to 1.0 feet bgs, and drill cuttings, generated during the boring of the hole, from approximately 0.5 feet bgs to ground surface. The wells are screened with 0.02 inch slots from a depth of approximately 1.0 feet bgs to approximately 5.0 feet bgs.

Proposed replacement monitoring well construction includes drilling to a total depth of 15.0 feet bgs with an 8 inch hollow stem auger and installation of 2 inch inside diameter PVC pipe from total depth to 3.0 feet ags. Fill space surrounding the pipe shall be backfilled with sand from 5.0 feet to 15.0 feet bgs, sealed with bentonite from 4.0 feet to 5.0 feet bgs, and topped with neat Portland cement from ground surface to 4.0 feet bgs (Figure 4). The wells will be screened with 0.02 inch slots from 5.0 feet to 15.0 feet bgs. Replacement wells are proposed to be drilled within 3 horizontal feet of the original MW-10, MW-11, and MW-12 well locations. Replacement wells will then be sampled quarterly for groundwater analysis according to the AST monitoring well programs.

Drill cuttings generated during the overdrilling and construction of the monitoring wells will be containerized in sealed 55-gallon DOT drums, stored on the upland Marine Terminal parcel, and profiled for disposal to appropriate disposal facilities.

The monitoring wells are located directly west of a concrete headwall, which is located on the western edge of the AST project site (see Figure 2). Drilling and over-drilling will be performed using an approximately 500 pound portable auger rig. The auger rig shall be carried to each drill location in separate components and assembled over each hole on top of a fiberglass mud mat or plywood mud box which will containerize the drill cuttings and support the weight of the drill rig. Two hydraulic hoses will be extended along the shoreline adjacent to the seawall from a hydraulic pump mounted on a 5 foot by 10 foot trailer. The trailer-mounted hydraulic pump will be staged on the upland parcel, on an asphalt surface. One hydraulic hose transports hydraulic fluid to the portable auger rig to turn the auger, the other hydraulic hose transports the heated fluid back to the hydraulic pump for cooling and reuse. Soil cuttings, extracted from the drill hole, will be shoveled in to a wheelbarrow and transported directly to a 55-gallon storage drum located on the asphalt surface. Impacts to the shoreline will be minimal, as no vehicular traffic will be required to reach the wells.

Equipment used for drilling in the immediate vicinity of the monitoring wells includes: hollow stem augers, hydraulic hosing, bags of sand, bentonite, and cement, a wheelbarrow, and shovels. Approximately three persons at a time will be working in the vicinity of the wells.

Vegetation within a 5 foot radius of monitoring well MW-10 and MW-12, the two wells lowest in elevation and most tidally influenced, consists only of cord grass (*Spartina densiflorus)*, in approximately 20 percent and 15 percent cover, respectively. Vegetation within a 5 foot radius of monitoring well MW-11 consists of 100 percent cover including cord grass, beach grass (*Ammophila arenaria*), American dune grass (*Leymus mollis*), sorrel (*Rumex acetosella*), common vetch (*Vicia sativa*), smooth cat's ear (*Hypochaeris glabra*), and salt bush (*Atriplex patula*). The species within the immediate project area are non-native weedy species, commonly found in disturbed areas with the exception of salt bush, which was noted to exist as 3 % cover.

Topography of the project area is gentle; the slope does not exceed approximately 7 percent. Soils are stable and consist of fine olive gray sands mixed with approximately 35 percent rounded cobbles and approximately 5 percent shell fragments at monitoring wells MW-10 and MW-12, and 100 percent fine olive gray sands and a cemented layer of black sand from 1 inch to 6 inches depth at monitoring well MW-11. Figure 4 shows topographical cross sections of the existing and proposed monitoring wells. The locations of the wells are identified on Figures 2 and 3.

The drilling shall be performed during low tide, at a time when soil disruption caused by drilling will not come in contact with bay water. No project-influenced turbidity is expected to enter Humboldt Bay as a result of this project. Hours of operation will be maximized at low tide; work is estimated for completion within 3-4 days.

A series of permit procedures and agency approvals are expected. The Humboldt Bay Harbor, Recreation, and Conservation District, The California Coastal Commission (Coastal Commission), the Regional Water Quality Control Board, and the Army Corp of Engineers each require a permit authorization process. No permit will be necessary from the City of Eureka or the California Department of Fish and Game (CDFG) as determined by Sidney Olson, City of Eureka, and Vicky Fry, CDFG, respectively during a site visit. Diane Ashton of National Oceanographic and Atmospheric Administration (NOAA) Fisheries stated during the site visit that informal consultation would occur with NOAA and no Biological Assessment would be necessary.

Project Capacity and Size

The proposed project would not change the location, size or capacity of the existing facility. The monitoring wells are located along a line perpendicular from the base of the pier, paralleling a concrete headwall (See Figures 2 and 3). The wells are approximately 1 to 2 feet from the headwall. The three monitoring wells proposed for replacement (replacement wells will be located within 3 feet of the existing wells) are located approximately 50 feet apart and cover an area each of less than one square foot. Overdrilling of the wells in place, and drilling of replacement wells within 3 feet should not disrupt a surface area larger than 25 square feet at each of the three locations. The

wells are located on the edge of Humboldt Bay, along the tidally influenced shoreline. The drill rig shall perform work from the base of the loading dock, on a flat paved area located approximately 30 feet from the nearest well. A broad estimate of project size is an area of approximately 250 feet by 30 feet.

Schedule

The necessary monitoring well replacement is proposed for fall of 2005, which allows time for all necessary permits and agency approvals. Proposed work will occur for approximately three to four work days. The drilling shall be performed during low tide, at a time when soil disruption caused by drilling will not come in contact with bay water.

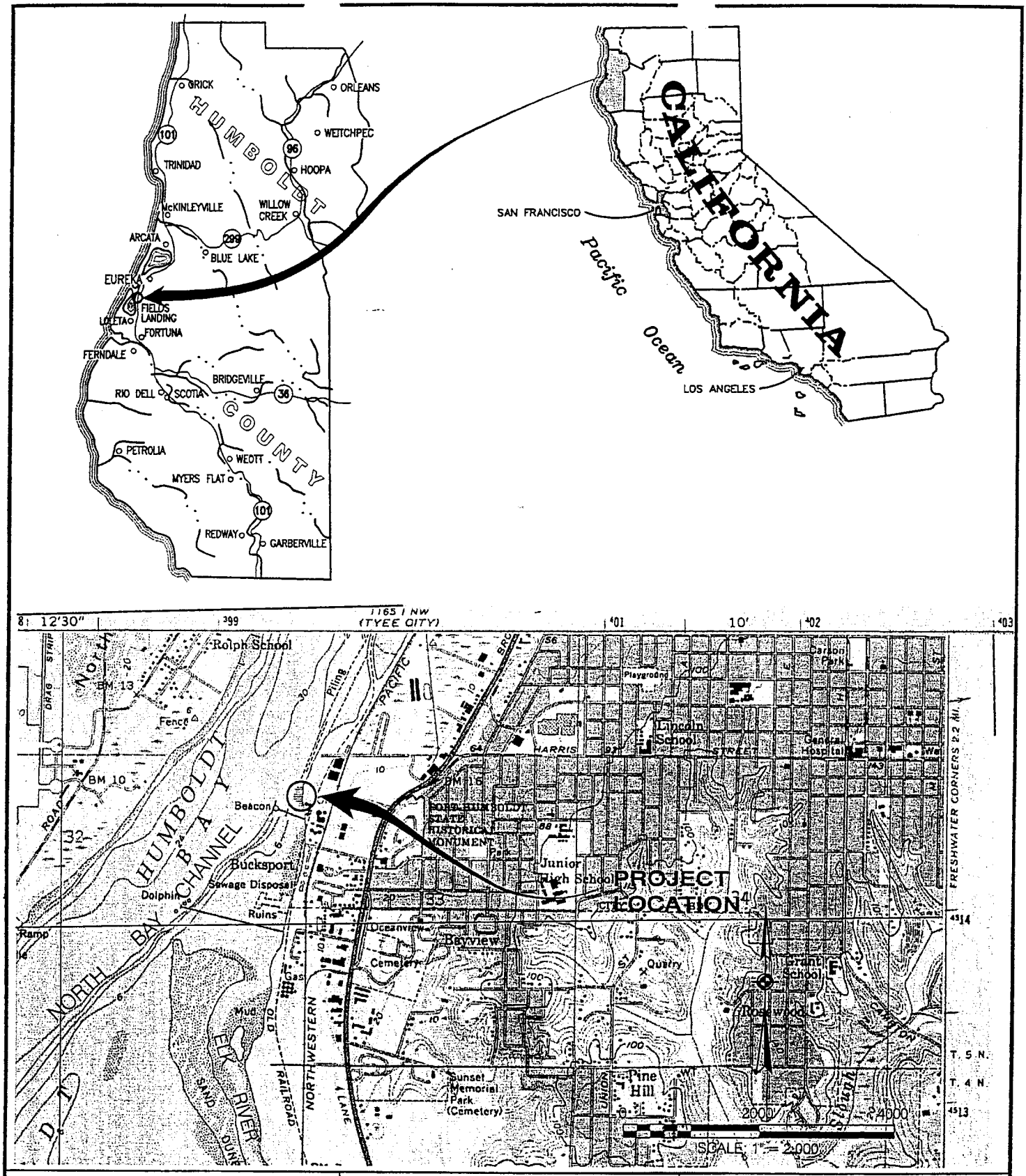
III. ADDITIONAL INFORMATION

5. Proposed development includes overdrilling of the three existing monitoring wells in place, and drilling of replacement wells within 3 feet. During overdrilling of each of three existing wells to approximately 5 feet in depth, approximately 0.1 cubic yards of material will be removed from each hole; in turn, approximately 0.1 cubic yards of Portland neat cement will be backfilled in each hole. During drilling of three replacement wells to approximately 15 feet in depth, approximately 0.3 cubic yards of material will be removed from each hole; in turn, less than approximately 0.3 cubic yards of sand, bentonite, and cement will be backfilled in each hole. Therefore the total amount of material to be removed for the project is approximately 1.2 cubic yards and the total amount of material to be replaced is approximately 1.2 cubic yards of material (excluding the 2-inch diameter space of the PVC pipe). Proposed placement of new structures are the replacement monitoring wells.

Table 1 - Well Construction and Location Details - Chevron Bulk Terminal 1001093, 3400 Christie Street, Eureka, California

Well	Top of Casing Elevation (ft above msl)	Date Installed	Total Well Depth (fbg)	Top of Bentonite (fbg)	Top of Sand (fbg)	Bottom of Sand (fbg)	Top of Screen (fbg)	Bottom of Screen (fbg)	Well Status
MW-1	13.5	12/8/83	11	0.4	0.9	11.4	4	10	Abandoned
MW-2	12.92	12/8/83	11	1.2	1.7	11	4	12.2	Abandoned
MW-3	9.79	12/8/83	12	0.5	1	12	0.5	10.5	Existing
MW-4	10.88	12/8/83	17	0.5	1	17	0.5	10.5	Existing
MW-5	11.67	12/8/83	17	0.5	1	17	0.5	10.5	Existing
MW-6	13.44	12/8/83	17	0.3	0.8	17	1	12.5	Existing
MW-7	11.49	12/8/83	17	0.4	0.9	17	0.5	10.5	Existing
MW-8	11.57	12/8/83	5.5	0.3	0.8	5.5	0.9	4.9	Existing
MW-9	11.14	12/8/83	6	0.5	1.0	6	1.5	5.5	Existing
MW-10	10.46	12/8/83	6	0.9	1.4	6	1.7	5.7	Existing
MW-11	11.28	12/8/83	6	0.4	0.9	6	1.9	5.9	Existing
MW-12	9.29	12/8/83	6	0.5	0.5	6	1.5	5.5	Existing
MW-13	8.07	12/9/83	6	0.2	0.7	6	0.8	4.8	Existing
MW-14	NA	12/9/83	5	0.1	0.3	5	0.8	4.8	Abandoned
MW-15	14.15	8/29/91	20	3.5	4	20	5	20	Existing
MW-16	13.8	7/21/92	19	3.5	4.5	19	5	19	Existing
MW-19	13.37	7/28/95	15	1.5	2.5	15	3	15	Existing
MW-20	13.71	7/28/95	15	1.5	2.5	15	3	15	Existing
MW-21	12.03	8/20/02	14.5	2	2.5	14.5	3	14.5	Existing
MW-22	13.94	8/20/02	14.5	2	2.5	14.5	3	14.5	Existing
MW-23	13.85	8/20/02	14.5	2	2.5	14.5	3	14.5	Existing
MW-24	14.77	8/20/02	14.5	2	2.5	14.5	3	14.5	Existing
P-1	14.94	7/21/92	30	3.5	4.5	30	5	30	

Source: Cambria Environmental Technology



PURPOSE: MONITORING WELL REPLACEMENT WITH DEEPER WELLS FOR COLLECTION OF GROUNDWATER SAMPLES

DATUM: MLLW

ADJACENT PROPERTY OWNERS: SEE ATTACHED

FIGURE 1
VICINITY MAP

OWNER:
TIDELANDS PARCEL: CITY OF EUREKA
MARINE TERMINAL PIER AND DOCK AND TANK FARM PARCEL: CHEVRON PRODUCTS CO.

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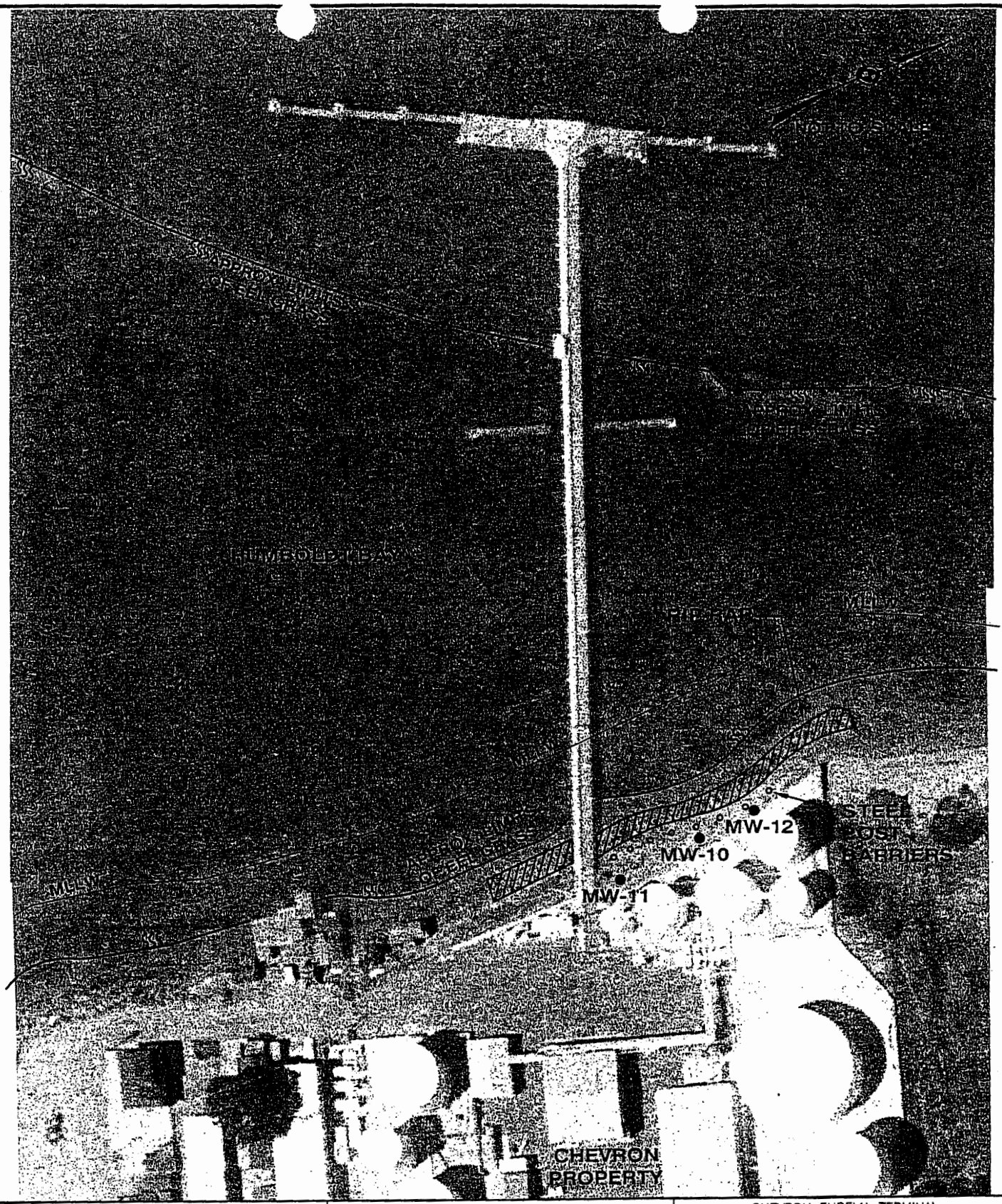
CHEVRON EUREKA TERMINAL
MONITORING WELL REPLACEMENT
IN HUMBOLDT BAY
AT EUREKA
COUNTY OF HUMBOLDT **STATE** CA
APPLICATION BY WINZLER & KELLY CONSULTING ENGINEERS
SHEET 1 **OF** 4

WINZLER & KELLY



PURPOSE: MONITORING WELL REPLACEMENT WITH DEEPER WELLS FOR COLLECTION OF GROUNDWATER SAMPLES

DATUM: MLLW

ADJACENT PROPERTY OWNERS: SEE ATTACHED

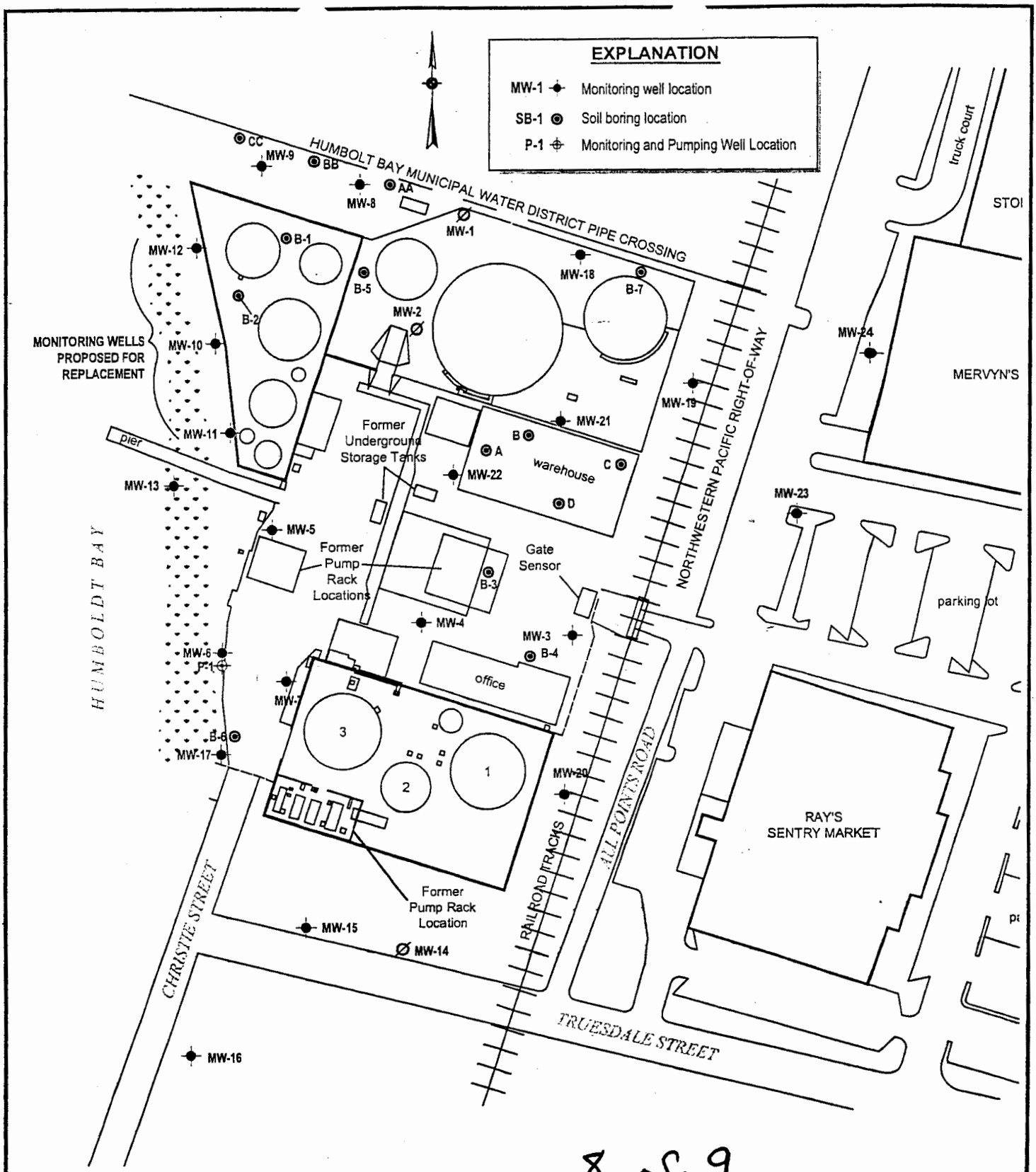
FIGURE 2
PLAN VIEW

OWNER:
TIDELANDS PARCEL: CITY OF EUREKA
MARINE TERMINAL PIER AND DOCK AND
TANK FARM PARCEL: CHEVRON PRODUCTS CO.

CHEVRON EUREKA TERMINAL
MONITORING WELL REPLACEMENT

IN HUMBOLDT BAY
AT EUREKA
COUNTY OF HUMBOLDT **STATE** CA
APPLICATION BY WINZLER & KELLY
CONSULTING ENGINEERS
SHEET 2 **OF** 4

WINZLER & KELLY



SOURCE: CAMBRIA ENVIRONMENTAL TECHNOLOGY

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SCALE: 1"=100'

PURPOSE: MONITORING WELL REPLACEMENT WITH DEEPER WELLS FOR COLLECTION OF GROUNDWATER SAMPLES

DATUM: MLLW

ADJACENT PROPERTY OWNERS: SEE ATTACHED

FIGURE 3
SITE PLAN

OWNER:
TIDELANDS PARCEL: CITY OF EUREKA
MARINE TERMINAL PIER AND DOCK AND TANK FARM PARCEL: CHEVRON PRODUCTS CO.

CHEVRON EUREKA TERMINAL
MONITORING WELL REPLACEMENT
IN HUMBOLDT BAY
AT EUREKA
COUNTY OF HUMBOLDT **STATE** CA
APPLICATION BY WINZLER & KELLY CONSULTING ENGINEERS
SHEET 3 **OF** 4

WINZLER & KELLY

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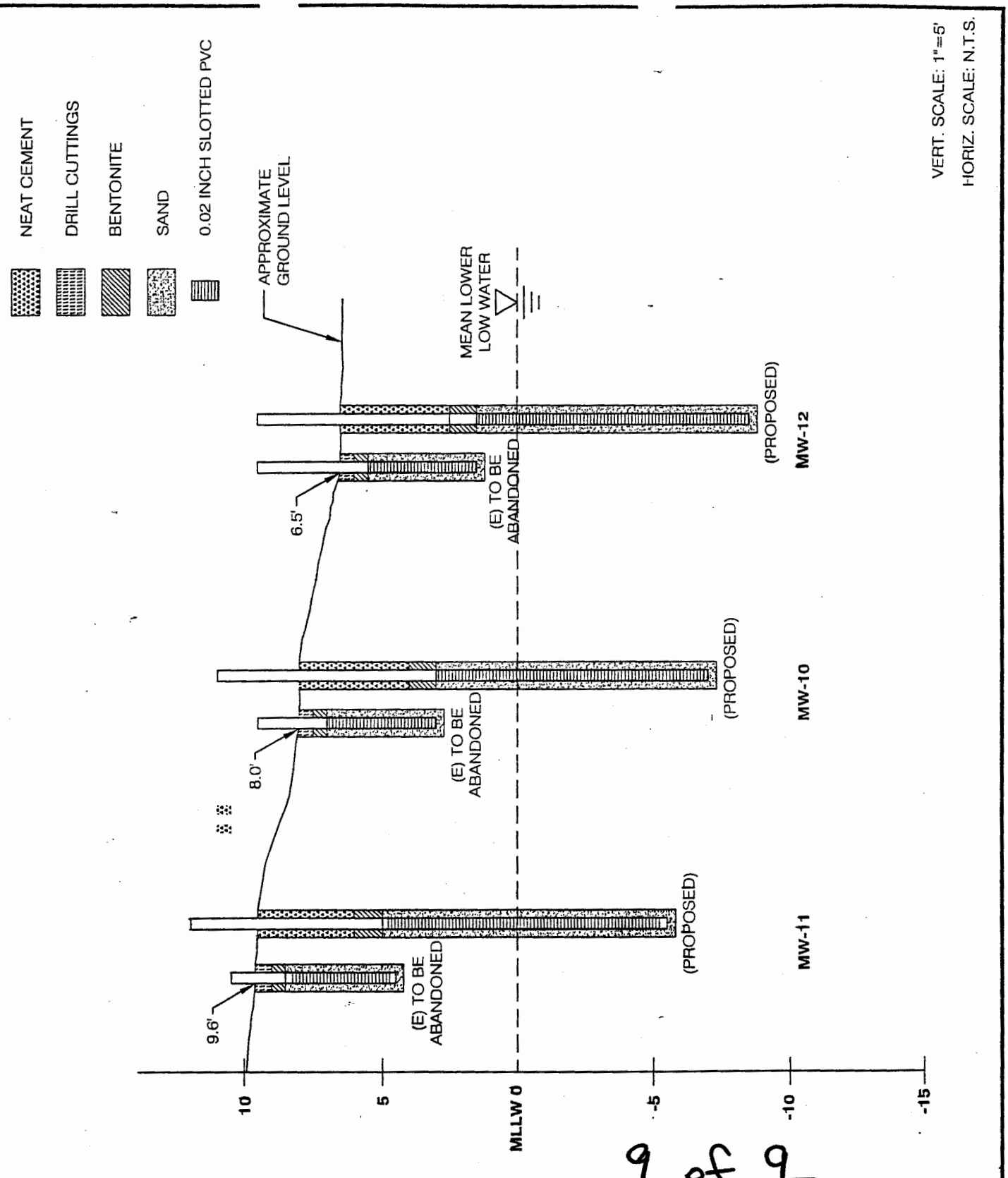

PURPOSE: MONITORING WELL REPLACEMENT WITH DEEPER WELLS FOR COLLECTION OF GROUNDWATER SAMPLES

DATUM: MLLW

ADJACENT PROPERTY OWNERS: SEE ATTACHED

FIGURE 4
CROSS SECTION OF MW-10, MW-11 & MW-12

OWNER:
TIDELANDS PARCEL: CITY OF EUREKA
MARINE TERMINAL PIER AND DOCK AND TANK FARM PARCEL: CHEVRON PRODUCTS CO.

CHEVRON EUREKA TERMINAL
MONITORING WELL REPLACEMENT
IN HUMBOLDT BAY
AT EUREKA
COUNTY OF HUMBOLDT **STATE** CA
APPLICATION BY WINZLER & KELLY
CONSULTING ENGINEERS
SHEET 4 **OF** 4

WINZLER & KELLY

Figure 3. CROSS SECTION OF A TYPICAL MONITORING WELL

(NOTE: Schematic, not to scale)

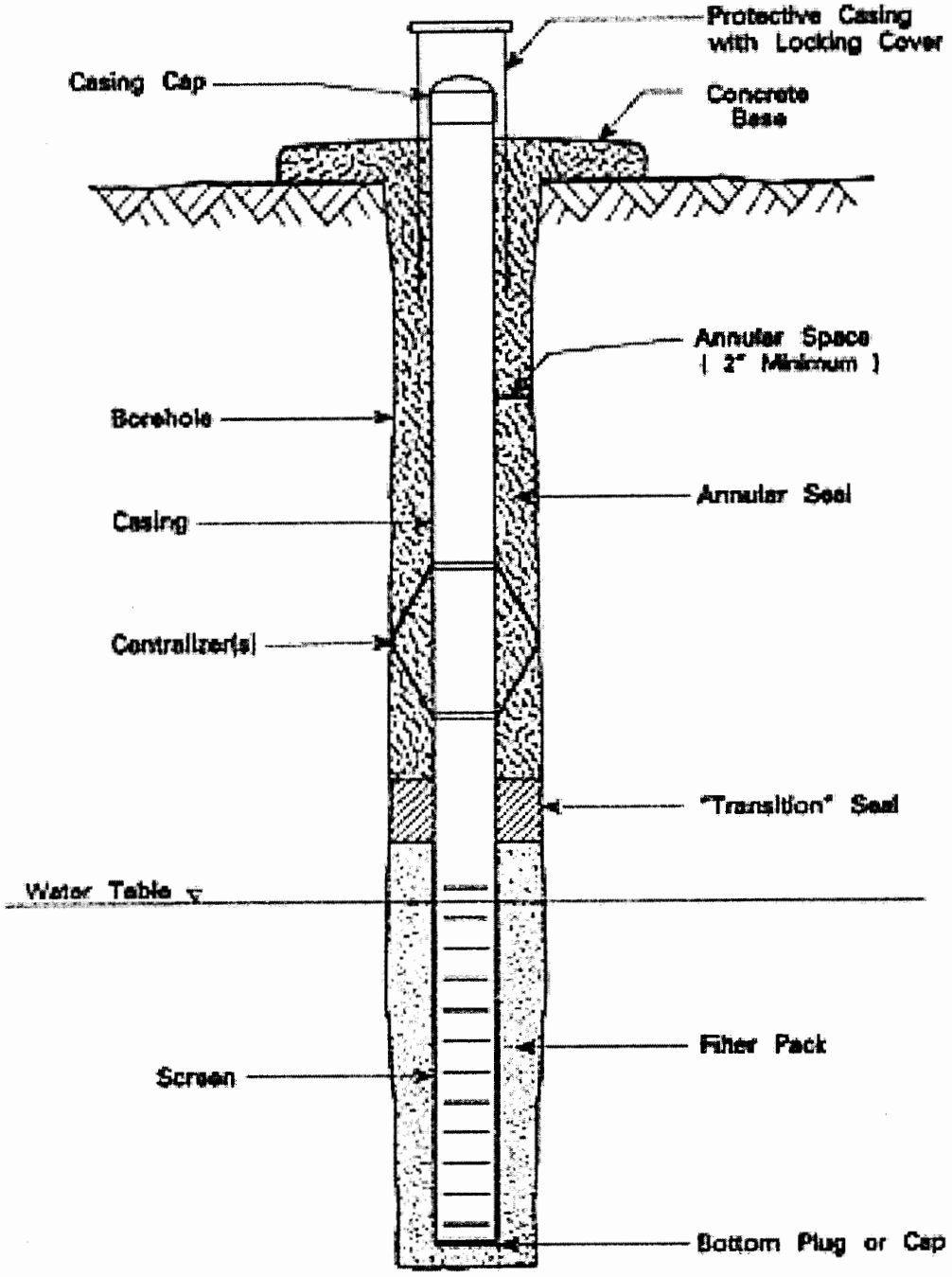

EXHIBIT NO. **5**

APPLICATION NO.

1-05-016 (Chevron)

Monitoring Well Construction Diagrams

CHEVRON EUREKA TERMINALWELL REPLACEMENT PROJECT
A. P. # 007-071-008, 013
RARE PLANT SURVEY RESULTS

Prepared By Gary S. Lester, Senior Botanist
Winzler & Kelly, Consulting Engineers
June 17, 2005

EXHIBIT NO. 6
APPLICATION NO.
1-05-016 (Chevron)
Rare Plant Survey
(Page 1 of 6)

1.0 INTRODUCTION

On April 14 and May 16, 2005, rare plant surveys were conducted for the proposed Chevron Eureka Terminal well replacement project. The surveys were conducted off Christie Street in the south western portion of the City of Eureka (T5N, R1W, Sec. 33, HBM), located approximately 2.5 miles southwest of the Humboldt County Courthouse. The survey was conducted to determine the presence of rare plant species and potential impacts due to well construction activities. The focused botanical survey of the Chevron Eureka Terminal well replacement project determined that no sensitive plant species were present in the project area.

The surveys were conducted by Winzler and Kelly senior botanist Gary Lester.

2.0 ENVIRONMENTAL SETTING

The Chevron Eureka Terminal well replacement project consists of approximately 0.23 acres (10,000 square feet). The survey area lies along the Humboldt Bay waterfront. The elevations in the project area range between 5 and 12 feet above mean sea level. The survey area features a flat beach, with a scattering of cobbles and rock rip rap within the plan area as well. Soils are beach sands.

The tidal beach vegetation is comprised of primarily dense to scattered European beach grass (*Ammophila arvensis*) and scattered dense-flowered cord grass (*Spartina densiflorus*), salt grass (*Distichlis spicata*) and beach morning glory (*Calystegia soldanella*). Canopy coverage ranges from 0% to 90%. A limited native herbaceous cover consists of red fescue (*Festuca rubra),* American dune grass (*Elymus mollis*), and dune tansy (*Tanacetum camphoratum*). A non-native component of ripgut grass (*Bromus diandrus*), sweet vernal grass (*Anthoxanthum oderatum*), sea rocket (*Cakile maritima*), perennial cat's ear (*Hypochaeris radicata*), common plantain (*Plantago major*), quaking grass (*Briza major*) also occurs, primarily scattered in beach sand. Reminant bank fill habitat within the survey area primarily consists of coyote brush (*Baccharis pilularis*), bur clover (*Medicago arabica*), velvet grass (*Holcus lanatus),* wild oats (*Avena barbata*), and a variety of other non-native grasses and herbs.

3.0 METHODS

A field survey of project area was conducted on, April 14 and May 16, 2005, and involved approximately 2 person-hours. Winzler & Kelly botanist Gary Lester conducted these surveys. Mr. Lester is qualified to conduct rare plant surveys. He has an undergraduate degree in Botany and has received training in recognition of the local flora and in rare plant identification and survey protocol.

The Chevron Eureka Terminal well replacement project area topographic maps, aerial photography maps, and the Eureka Quad California Department of Fish and Game Natural Diversity Data Base were consulted prior to and during the survey to determine potential sensitive species occurrence.

The surveys were conducted following protocol developed by James Nelson for the California Department of Fish and Game (DFG 2000). An intuitively controlled, seasonally appropriate survey was conducted that sampled the identified potential habitat. The survey was high in coverage (95-100%). Plants were identified to the lowest taxonomic level (genus or species) necessary for rare plant identification. The scientific nomenclature follows the Jepson Manual (Hickman 1993).

4.0 SENSITIVE SPECIES ANALYSIS

Sensitive Plant Species Historically Reported Nearby

The California Natural Diversity Database (CNDDB) includes historical records for eight species within the Eureka (salt marsh and dune species only) 7.5 minute USGS quadrangle:

1) The pink sand-verbena (*Abronia umbellata* ssp. *breviflora*) is attributed to numerous collections on North Spit.

2) The marsh milkvetch (*Astragalus pycnostachyus* var. *pycnostachyus)* was reported historically in salt marshes near Samoa.

3) Lyngbye's sedge (*Carex lyngbyei*) was reported near North Spit and Eureka Slough.

4) Oregon coast Indian paintbrush (*Castilleja affinis* ssp. *litoralis*) had been reported in 1918 from the coastal dunes of the Eureka vicinity.

5) Humboldt Bay owl's clover (*Castilleja ambigua* ssp. *humboldtiensis*) occurs from nearby Elk River Slough in 1986, and other salt marsh habitats throughout Humboldt Bay.

6) Pt. Reyes bird's beak (*Cordylanthus maritimus* ssp. *palustris*) known from a nearby 1987 collection site on Elk River Spit, and widespread salt marsh habitats in Humboldt Bay.

7) Humboldt Bay wallflower (*Erysimum menziesii* ssp. *eurekense*) is known from widespread North and South Spit dune habitats.

8) Pacific gilia (*Gilia capitata* ssp. *pacifica*) from an old collection noted as the sandy field behind Bucksport.

9) Dark-eyed gilia (*Gilia millefoliata*) occurs from nearby Elk River sand spit in 1998, and other dune habitats throughout Humboldt Bay.

10) Sand pea (*Lathyrus japonicus*) known from a nearby 1915 collection site on Elk River Spit.

11) Beach layia (*Layia carnosa*) is known nearby Elk River Spit and from widespread North and South Spit dune habitats.

12) Western sand spurrey (*Spergularia canadensis* var. *occidentalis*) is known only in California from Humboldt Bay. The collection is from a vague Samoa salt marsh at an unknown location.

Potential Sensitive Species Present

All species included on List 1 and 2 (herein referred to as sensitive species) of the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (Tibor 2001) were reviewed to determine potential presence in the vicinity of the Chevron Eureka Terminal well replacement project area. The CNPS inventory includes all species listed as rare or endangered by the Federal and State governments. Based on the species identified in the CNDDB records, the range of habitats present, and the geographical range of the various sensitive species, the species considered most likely to occur in the vicinity of the Chevron Eureka Terminal well replacement project are listed in Table 1. Only the special habitats, salt marsh and coastal dunes were present, eliminating many sensitive species specific other types of habitats.

The following summaries are for the sensitive plant species shown in Table 1:

Pink sand-verbena grows in the coastal wave slope. Marginal habitat for this species may occur on the edges of sand beach within the plan area.

The **marsh milkvetch** has been reported from the salt marsh habitats of Humboldt Bay, which marginally occur within the survey area. Marsh milkvetch has not been recorded in the region for decades.

Lyngbye's sedge is known from the north coast of California to British Columbia, in both salt and freshwater marshes. Historical populations are known from the mouth of Elk River (Eureka). Lyngbye's sedge was considered potentially present due to its reported adjacent occurrence.

Oregon coast Indian paintbrush is known from historical collections near Humboldt Bay. The known occurrences of Oregon coast Indian paintbrush occur in coastal bluffs. This species may occur in coastal dunes.

The **Humboldt Bay owl's clover** is widely distributed over much of the northwestern California in coastal salt marsh habitats.

The **Pt. Reyes bird's beak** is widespread in coastal salt marsh habitats in northwestern California. Closest occurrence recorded from the Elk River Spit.

Humboldt Bay wallflower is known from coastal dunes near Humboldt Bay.

The **Pacific gilia** is widely distributed over much of the northwestern California in coastal bluff habitats. The reported historical account for Eureka is a grassy field from nearby Bucksport.

Habitat for the **Dark-eyed gilia** is coastal sand dunes in northwestern California. Potential habitat for both of these species is considered to be marginal within the survey area.

Sand pea is known from coastal dunes from Humboldt to Del Norte counties.

The **beach layia** is widely distributed over much of the northwestern California in coastal bluff habitats. The reported historical account for Eureka is a grassy field from nearby Bucksport.

The **western sand spurrey** is known only in northwestern California from Humboldt Bay coastal salt marsh. The reported historical account for Samoa is a vague and the location unknown

TABLE 1
Sensitive Species Potentially Present at the Chevron Eureka Terminal Well Replacement Project Area

Species	Common Name	CNPS List	Preferred Habitat
Abronia umbellata ssp. *breviflora*	pink sand verbana	1B	Coastal wave slope; flowers May – July
Astragalus pycnostachyus var. *pycnostachyus*	marsh milk vetch	1B	Salt marsh, possibly extirpated in Humboldt Bay; flowers April – October
Carex lyngbeyi	Lyngbye's sedge	2	Salt marsh; identifiable year-round
Castilleja affinis ssp. *litoralis*	Oregon coast Indian paintbrush	2	Coastal bluffs, coastal dunes coastal scrub; flowers June
Castilleja ambigua ssp. *humboldtiensis*	Humboldt Bay owl's clover	1B	Salt marsh; flowers April-August
Cordylanthus maritimus ssp. *palustris*	Pt. Reyes bird's beak	1B	Salt marsh; flowers June-October
Erysimum menziesii ssp. *eurekense*	Humboldt Bay wallflower	1B	Openings in redwood forest, coast scrub and prairie; flowers late May-June
Gilia millefoliata.	Pacific gilia	1B	Coastal bluffs, grasslands; flowers late May-August
Gilia capitata ssp. *pacifica*	dark-eyed gilia	1B	Coastal dunes; flowers late April-July
Lathyrus japonicus	sand pea	2	Coastal dunes; flowers late May-August
Layia carnosa	beach layia	1B	Coastal dunes; flowers March to July
Spergularia canadensis var. *occidentalis*	western sand spurrey	2	Coastal salt marsh; flowers June-August

5.0 RESULTS

Seasonally appropriate surveys were conducted for all potentially occurring sensitive species. The focused botanical survey of the Chevron Eureka Terminal well replacement project determined that no sensitive plant species were present in the project area. A complete species list of those plants found on the Chevron Eureka Terminal well replacement project are provided in Table 2.

7.0 REFERENCES

California Department of Fish and Game. May 2000. *Guidelines for Assessing the Effects of Proposed Development on Rare, Threatened, and Endangered Plants and Plant Communities.* Sacramento, CA.

Hickman, J. C. 1993. *The Jepson Manual: Higher Plants of California.* University of California Press. Berkeley CA.

McLaughlin, J. and Harradine, F. 1965. *Soils of Western Humboldt County, California.* University of California, Davis, County of Humboldt, Eureka, CA.

Tibor, David, P, editor. 2001. *California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California,* Sacramento, CA.

Gary S. Lester

Date 6/17/05

Gary S. Lester
Senior Botanist
Winzler & Kelly, Consulting Engineers

TABLE 2
SPECIES ENCOUNTERED DURING FIELD SURVEY OF CHEVRON EUREKA TERMINAL WELL REPLACEMENT PROJECT
April 14 and May 16, 2005

Aira caryophyllea
Ammophila arenaria
Anthoxanthum odoratum
Avena barbata
Baccharus pilularis
Briza major
Bromus diandrus
Brassica rapa
Calystegia soldenella
Catkile maritima
Cerastium glomeratum
Cirsium vulgare
Conyza canadensis
Cynosurus enchinatus
Daucus carota
Dactylis glomerata
Distichlis spicata
Elymus mollis
Festuca rubra
Fragaris chiloensis
Geranium molle
Holcus lanatus
Hypochaeris radicata
Juncus lesueurii
Leucanthemum vulgare
Lolium perenne
Medicago arabica
Parentucellia viscosa
Plantago major
Poa annua
Prunella vulgaris
Raphanus sativa
Rubus discolor
Rumex acetocella
Rumex crispus
Spartina densiflora
Sonchus oleraceus
Taraxacum officinale
Tanacetum camphoratum
Vicia hirsuta
Vulpia bromoides

California Regional Water Quality Control Board
North Coast Region
Beverly Wasson, Chairperson

Alan C. Lloyd, Ph.D.
Agency Secretary

http://www.waterboards.ca.gov/northcoast
5550 Skylane Boulevard, Suite A, Santa Rosa, California 95403
Phone: 1 (877) 721-9203 (toll free) • Office: (707) 576-2220 • FAX: (707) 523-0135

Arnold Schwarzenegger
Governor

May 17, 2005

EXHIBIT NO. 7
APPLICATION NO.
1-05-016 (Chevron)
Review Agency
Correspondence
(Page 1 of 23)

Mr. Misha Schwarz
Winzler & Kelly
633 Third Street
Eureka, CA 95501-0147

Dear Mr. Schwarz:

Subject: Application for Water Quality Certification for Installation of Three Monitoring Wells at the Chevron Marine Terminal, Eureka, Humboldt County

File: Chevron USA Marine Terminal, 3400 Christie Street, Eureka, CA
Case No. 1NHU523

This letter is being sent in response to your April 11, 2005 application for Clean Water Act Section 401 Water Quality Certification for the monitoring well replacement project at the Chevron Marine Terminal in Eureka. On May 5, 2005, you informed me that the U.S. Army Corps of Engineers determined that the project qualifies for coverage under Nationwide Permit No. 6 (Survey Activities). The State Water Resources Control Board has already certified Nationwide Permit No. 6. Therefore, individual certification of the monitoring well installation project by the Regional Water Board is not required. No further permitting action is required by this agency for the project provided the project is completed in strict compliance with the project description and all applicable requirements of the Regional Water Board's Water Quality Control Plan for the North Coast Region (Basin Plan).

A May 3, 2005 letter from Lori Foster incorrectly stated that we received a $5,000 fee with the application for 401 Water Quality Certification. An application fee of $500 was submitted with the application. Since the proposed project is being permitted under a Nationwide Permit that already received 401 Water Quality Certification (or waiver), the application fee for this project is $60. I have requested that the State Water Resources Control Board send Chevron Products Company a refund in the amount of $440.

Please call me at (707) 576-2801 if you have any questions.

Sincerely,

Dean Prat, P.G.
Engineering Geologist

051705_DLP_tmk_chevroneur4ekamonwllcer_050505

cc: Chevron Products Company, 3400 Christie Street, Eureka, CA 95401
U.S. Army Corps of Engineers, District Engineer, P.O. Box 4863, Eureka, CA 95502
Ms. Jane Hicks, U.S. Army Corps of Engineers, Regulatory Functions, 333 Market Street, San Francisco, CA 94599

DEPARTMENT OF THE ARMY
SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS
333 MARKET STREET
SAN FRANCISCO, CALIFORNIA 94105-2197

MAY 0 2 2005

Regulatory Branch

SUBJECT: File No. 294890N

Scott Parsons
Terminal Manager
Chevron Products Company
3400 Christie Street
Eureka, CA 95501

Dear Mr. Parsons:

This letter is written in response to your submittal of March 14, 2005, concerning Department of the Army (Corps) authorization to replace three monitoring wells, located at the Chevron Eureka Terminal at 3400 Christie Street, in the City of Eureka, Humboldt County, California. The wells are spaced approximately 50 feet apart and each covers an area less than one square-foot.

Based on a review of the information in your submittal and an inspection of the project site conducted by Corps personnel on April 26, 2005, your project qualifies for authorization under Department of the Army NWP 6 for Survey Activities (67 Fed. Reg. 2020, Jan. 15, 2002), pursuant to 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). All work shall be completed in accordance with the attached plans and drawings titled, "Chevron Eureka Terminal Monitoring Well Replacement Plan View (Figure 2)," dated April 26, 2005, and "Cross Section (Figure 4)," dated April 26, 2005. See Enclosure 1.

The project must be in compliance with the General Conditions cited in Enclosure 2 for this nationwide permit authorization to remain valid. Non-compliance with any condition could result in the suspension, modification, or revocation of the nationwide permit authorization for your project, thereby requiring you to obtain an individual permit from the Corps. Project authorization under the nationwide permit does not obviate the need to obtain other State or local approvals required by law.

Project authorization will remain valid until March 18, 2007, unless the nationwide permit is suspended, modified, or revoked. If you have commenced work or are under contract to commence work prior to the suspension, or revocation of the nationwide permit and the project could not comply with any newly issued nationwide permit, you shall have twelve (12) months from the expiration date to complete the project under the present terms and conditions of this

nationwide permit authorization. Upon completion of the project and all associated mitigation requirements, you shall sign and return the Certification of Compliance, Enclosure 3, verifying that you have complied with the terms and conditions of the nationwide permit.

Project authorization will not be effective until you have obtained a Section 401 water quality certification from the Regional Water Quality Control Board (RWQCB), North Coast Region, and a concurrence from the California Coastal Commission that your project complies with California's Coastal Zone Management Act. If the RWQCB fails to act on a valid request for certification within two (2) months after receipt of a complete application, the Corps may presume that a water quality certification has been obtained. If the Commission fails to act on a valid request for concurrence with your certification within six (6) months after receipt, the Corps may presume a concurrence has been obtained. You shall submit a copy of the certification and the concurrence to the Corps prior to the commencement of work.

To ensure compliance with this Nationwide Permit authorization, the following Special Conditions shall be implemented:

1. The auger rig shall be carried to each drill location in separate components and assembled over each hole on top of a plywood mud box, which confines the drill cuttings and supports the weight of the drill rig.

2. Drill cuttings shall be shoveled in to a wheelbarrow and transported directly to a 55 gallon DOT storage drum. The drum shall be then tightly sealed and stored on the upland Marine Terminal parcel. Samples from the drums shall be collected and submitted for laboratory analysis in order to profile the cuttings for disposal to appropriate disposal facilities. No sample stockpiling shall occur will occur.

3. The drilling shall be performed during low tide, at a time when the soil disruption caused by drilling will not come in contact with bay water as a result of this project.

4. Hours of operation will be maximized at low tide and de-watering of the site will not be necessary.

5. In the event of a spill, all appropriate control measures shall be implemented, as specified in the "Spill Prevention and Control and Countermeasure Plan" for the Eureka Terminal (February 2004).

Should you have any questions regarding this matter, please call Carol Heidsiek of our Regulatory Branch at 707-443-0855. Please address all correspondence to the Regulatory Branch and refer to the File Number at the head of this letter. If you would like to provide comments on our permit review process, please complete the Customer Survey Form available through the Forms and Contacts Block on our website: http://www.spn.usace.army.mil/regulatory/.

Sincerely,

for Peter D. Straub

Jane M. Hicks
Acting Chief, Regulatory Branch

Enclosures

Copy Furnished (w/ enclosures):
Mr. Misha Schwarz, Winzler and Kelly Consulting Engineers, Eureka, CA

Copies Furnished (w/o enclosures):
US EPA, San Francisco, CA
US FWS, Arcata, CA
US NMFS, Arcata, CA
CA CC, Eureka, CA
CA DFG, Redding, CA
CA RWQCB, Santa Rosa, CA

Nationwide Permit General Conditions - March 18, 2002

The following General Conditions must be followed in order for any authorization by an NWP to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.

2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

4. Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.

5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

6. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (See 33 CFR Part 330.4(e).) and with any case specific conditions added by the Corps or by the State or tribe in its Section 401 Water Quality Certification or Coastal Zone Management Act consistency determination.

7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).

8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

9. Water Quality.

(a) In certain states and tribal lands an individual Section 401 Water Quality Certification must be obtained or waived. (See 33 CFR Part 330.4(c).)

(b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the state or tribal Section 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality. (Refer to General Condition 21 for stormwater management requirements.) Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams. (Refer to General Condition 19 for vegetated buffer requirements for the NWPs.)

This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures or to require monitoring.

10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained or waived. (See 33 CFR Part 330.4(d).)

11. Endangered Species.

(a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or

threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS, the District Engineer may add species-specific regional endangered species conditions to the NWPs.

(b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/r9endspp/endspp.html and http://www.nfms.gov/prot_res/overview/es.html respectively.

12. Historic Properties. No activity which may affect historic properties listed, or eligible for listing, in the National Register of Historic Places is authorized, until the District Engineer has complied with the provisions of 33 CFR Part 325, Appendix C. The prospective permittee must notify the District Engineer if the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. (See 33 CFR Part 330.4(g).) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification.

(a) Timing: Where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the notification is complete within 30 days of the date of receipt and can request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:

(1) Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or

(2) If notified in writing by the District or Division Engineer that an Individual Permit is required; or

(3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR Part 330.5(d)(2).

(b) Contents of Notification: The notification must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed project;

(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) For NWPs 7, 12, 14, 18, 21, 29, 31, 34, 38, 39, 40, 41, 42, and 43, the PCN must include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (See Paragraph 13(f) below.);

(5) For NWP 7 (Outfall Structures and Maintenance), the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed;

(6) For NWP 14 (Linear Transportation Projects), the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the U.S. and a statement describing how temporary losses of waters of the U.S. will be minimized to the maximum extent practicable;

(7) For NWP 21 (Surface Coal Mining Activities), the PCN must include an Office of Surface Mining (OSM) or state-approved mitigation plan, if applicable. To be authorized by this NWP, the District Engineer must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing;

(8) For NWP 27 (Stream and Wetland Restoration Activities), the PCN must include documentation of the prior condition of the site that will be reverted by the permittee;

(9) For NWP 29 (Single-family Housing), the PCN must include:

(i) Any past use of this NWP by the prospective permittee and/or the permittee's spouse;

(ii) A statement that the single-family housing activity is for a personal residence of the permittee;

(iii) A description of the entire parcel, including its size, and a delineation of wetlands. For the purpose of this NWP, parcels of land measuring 1/4 acre or less will not require a formal on-site delineation. However, the applicant shall provide an indication of where the wetlands

are and the amount of wetlands that exists on the property. For parcels greater than 1/4 acre in size, formal wetland delineation must be prepared in accordance with the current method required by the Corps. (See Paragraph 13(f) below.);

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's spouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirety) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31 (Maintenance of Existing Flood Control Facilities), the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a five year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information identifying the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and

(iii) Location of the dredged material disposal site;

(11) For NWP 33 (Temporary Construction, Access, and Dewatering), the PCN must include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic resources;

(12) For NWPs 39, 43, and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization for losses of waters of the US were achieved on the project site;

(13) For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal to offset losses of waters of the US or justification explaining why compensatory mitigation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(14) For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the U.S. This NWP does not authorize the relocation of greater than 300 linear feet of existing serviceable drainage ditches constructed in non-tidal streams unless, for drainage ditches constructed in intermittent non-tidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the project on the aquatic environment are minimal, both individually and cumulatively;

(15) For NWP 43 (Stormwater Management Facilities), the PCN must include, for the construction of new stormwater management facilities, a maintenance plan (in accordance with state and local requirements, if applicable) and a compensatory mitigation proposal to offset losses of waters of the U.S. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(16) For NWP 44 (Mining Activities), the PCN must include a description of all waters of the U.S. adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the U.S., a description of measures taken to comply with the criteria of the NWP, and a reclamation plan (for all aggregate mining activities in isolated waters and non-tidal wetlands adjacent to headwaters and any hard rock/mineral mining activities);

(17) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

(c) Form of Notification: The standard Individual Permit application form (ENG FORM 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in Paragraphs (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.

(d) District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary. The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the

District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either:

(1) that the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit;

(2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or

(3) that the project is authorized under the NWP with specific modifications or conditions.

Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the U.S. will occur until the District Engineer has approved a specific mitigation plan.

(e) Agency Coordination: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than 1/2 acre of waters of the U.S., the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetland Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps. (For NWP 29 see Paragraph (b)(9)(iii) for parcels less than 1/4 acre in size.) The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. Compliance Certification. Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:

(a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;

(b) A statement that any required mitigation was completed in accordance with the permit conditions; and

(c) The signature of the permittee certifying the completion of the work and mitigation.

15. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the U.S. authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the U.S. for the total project cannot exceed 1/3 acre).

16. Water Supply Intakes. No activity, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.

17. Shellfish Beds. No activity, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material. No activity, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts. (See Section 307 of the CWA.)

19. Mitigation. The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the U.S. to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, unless the District Engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(d) Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWPs. For example, 1/4 acre of wetlands cannot be created to change a 3/4 acre loss of wetlands to a 1/2 acre loss associated with NWP 39 verification. However, 1/2 acre of created wetlands can be used to reduce the impacts of a 1/2 acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWPs.

(e) To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the District Engineer may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the District Engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

(g) Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the U.S.

(h) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. Spawning Areas. Activities, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

22. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting of its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the U.S., or discharges of dredged or fill material.

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. **Removal of Temporary Fills.** Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. **Designated Critical Resource Waters.** Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Except as noted below, discharges of dredged or fill material into waters of the U.S. are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the U.S. may be authorized by the above NWPs in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the FWS or the NMFS has concurred in a determination of compliance with this condition.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The District Engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

26. **Fills Within 100-Year Floodplains.** For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.

(a) Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the U.S. within the mapped 100-year floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, 43, and 44.

(b) Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the U.S. within the FEMA or locally mapped floodway, resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, and 44.

(c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.

27. **Construction Period.** For activities that have not been verified by the Corps and the project was commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12 months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period, the work must be completed by the date determined by the Corps.

For projects that have been verified by the Corps, an extension of a Corps approved completion date maybe requested. This request must be submitted at least one month before the previously approved completion date.

END

Enclosure 3

Permittee: **Chevron Products Company**

File No. **294890N**

Certification of Compliance
for
Nationwide Permit

"I hereby certify that the work authorized by the above referenced File Number and all required mitigation have been completed in accordance with the terms and conditions of this Nationwide Permit authorization."

PERMITTEE _____ DATE _____

Return to:

Carol Heidsiek
U.S. Army, Corps of Engineers
San Francisco District
Regulatory Branch, CESPN-OR-R
333 Market Street
San Francisco, CA 94105-2197

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PURPOSE: MONITORING WELL REPLACEMENT WITH DEEPER WELLS FOR COLLECTION OF GROUNDWATER SAMPLES AS PART OF STATE U.S.T. PROGRAM

DATUM: MLLW

ADJACENT PROPERTY OWNERS: SEE ATTACHED

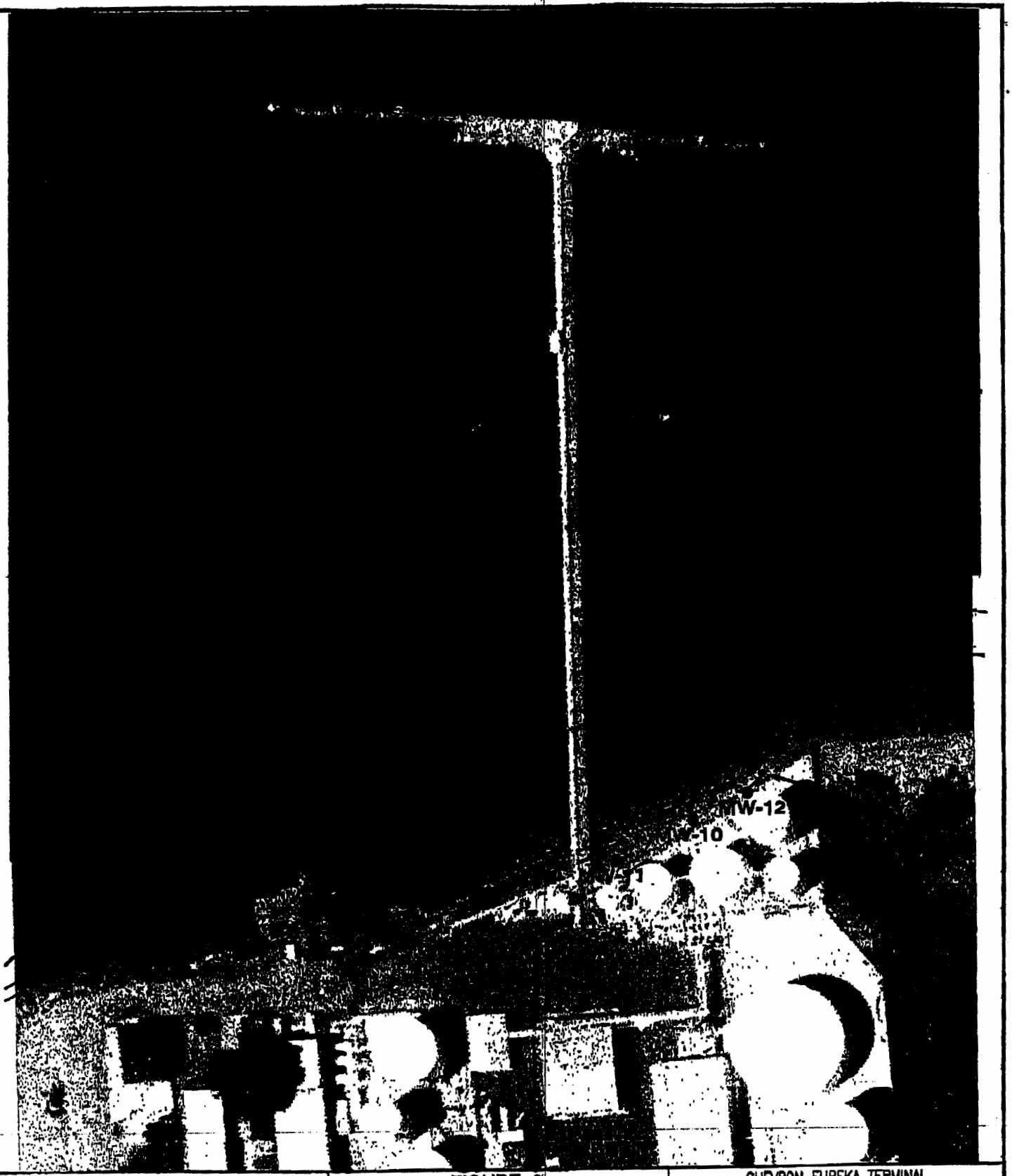
FIGURE 4
CROSS SECTION OF MW-10, MW-11 & MW-12

OWNER:
TIDELANDS PARCEL: CITY OF EUREKA
MARINE TERMINAL PIER AND DOCK AND TANK FARM PARCEL: CHEVRON PRODUCTS CO.

CHEVRON EUREKA TERMINAL
MONITORING WELL REPLACEMENT
IN HUMBOLDT BAY
AT EUREKA
COUNTY OF HUMBOLDT **STATE** CA
APPLICATION BY WINZLER & KELLY
CONSULTING ENGINEERS
SHEET 4 OF 4

WINZLER & KELLY

FILE: J:\CAD\JOBS\2005\0187805031\dwg\B78a031f04.dwg DATE: Apr 25 05 @ 2:48pm



PURPOSE: MONITORING WELL REPLACEMENT WITH DEEPER WELLS FOR COLLECTION OF GROUNDWATER SAMPLES AS PART OF STATE U.S.T. PROGRAM

DATUM: MLLW

ADJACENT PROPERTY OWNERS:
SEE ATTACHED

FIGURE 2
PLAN VIEW

OWNER:
TIDELANDS PARCEL: CITY OF EUREKA
MARINE TERMINAL PIER AND DOCK AND
TANK FARM PARCEL: CHEVRON PRODUCTS CO.

CHEVRON EUREKA TERMINAL
MONITORING WELL REPLACEMENT

IN HUMBOLDT BAY
AT EUREKA
COUNTY OF HUMBOLDT **STATE** CA
APPLICATION BY WINZLER & KELLY
CONSULTING ENGINEERS
SHEET 2 **OF** 4

WINZLER & KELLY

0187805001-11033

WATER QUALITY CERTIFICATION APPLICATION

CHEVRON EUREKA TERMINAL
MAINTENANCE DREDGING

April 2005

Prepared for:
Chevron Products Company
3400 Christie Street
Eureka, CA 95501
Phone (707) 444-7850

14 of 23

Prepared by:
Winzler & Kelly Consulting Engineers
633 Third Street
Eureka, CA 95502-1030

Project Information

a) Project description and purpose

Replacement of three monitoring wells is proposed for an area on APN 007-071-013 adjacent to the existing Eureka Chevron Marine Terminal (APN 007-071-008), as shown in the attached vicinity map (Figure 1), plan view (Figure 2), site plan (Figure 3), and cross section view (Figure 4). The proposed project area shall occur along Humboldt Bay, California, a portion of which is intertidal as discussed below.

At present, the monitoring wells proposed for replacement (drilled to a depth of approximately 5 feet bgs) do not provide groundwater for collection of samples. The proposed monitoring wells, to be drilled to a depth of 15 feet bgs within 3 feet of existing monitoring wells MW-10, MW-11, and MW-12, are expected to provide the groundwater samples necessary for quarterly monitoring for analysis of petroleum products in groundwater as part of an above ground storage tank (AST) project. The Chevron AST investigation includes a total of 22 existing monitoring wells. This well replacement project is proposed in response to a request by the California Regional Water Quality Control Board (CRWQCB) as part of the ongoing AST monitoring project at the site. Subsequent to implementation of well replacement, quarterly monitoring samples will be collected and submitted for laboratory analysis and results will be reported to the CRWQCB.

The total size of the project area covers an area of approximately 100 feet by 10 feet (see Figure 3). An area of approximately 25 square feet in the immediate vicinity of each of the three monitoring wells (a total of 75 square feet) shall potentially be impacted during drilling activities. The project area is along the shoreline of Humboldt Bay; the project area surrounding monitoring wells MW-10 and MW-12 is below the high tide line. Ground surface elevation, as measured during a site visit in February 2005, at monitoring wells MW-10, MW-11, and MW-12 was 8.0 feet, 9.6 feet, and 6.5 feet above mean lower low water (MLLW), respectively.

Monitoring wells MW-10, MW-11, and MW-12, are proposed for destruction by over-drilling to their entire depth by a California Certified Drilling Company, and by grouting the borings to the surface with neat Portland cement. Existing well construction consists of a 3 inch inside diameter PVC pipe installed from a depth of 5.0 feet bgs to 3.0 feet above ground surface (ags), a total of approximately 8 feet of pipe. The wells were installed with a 6 inch diameter hollow stem auger. Fill space around the outside of the pipe consists of a sand pack from approximately 1.0 foot bgs to 6.0 feet bgs, a bentonite seal from 0.5 feet bgs to 1.0 feet bgs, and drill cuttings, generated during the boring of the hole, from approximately 0.5 feet bgs to ground surface. The wells are screened with 0.02 inch slots from a depth of approximately 1.0 feet bgs to approximately 5.0 feet bgs.

Proposed replacement monitoring well construction includes drilling to a total depth of 15.0 feet bgs with an 8 inch hollow stem auger and installation of 2 inch inside diameter PVC pipe from total depth to 3.0 feet ags. Fill space surrounding the pipe shall be backfilled with sand from 5.0 feet to 15.0 feet bgs, sealed with bentonite from 4.0 feet to 5.0 feet bgs, and topped with neat Portland cement from ground surface to 4.0 feet bgs (Figure 4). The wells will be screened with 0.02 inch slots from 5.0 feet to 15.0 feet bgs. Replacement wells are proposed to be drilled within 3 horizontal feet of the original MW-10, MW-11, and MW-12 well locations.

Replacement wells will then be sampled quarterly for groundwater analysis according to the AST monitoring well programs.

The monitoring wells are located directly west of a concrete headwall, which is located on the western edge of the AST project site (see Figure 2). Drilling and over-drilling will be performed using an approximately 500 pound portable auger rig. The auger rig shall be carried to each drill location in separate components and assembled over each hole on top of a plywood mud box which will confine the drill cuttings and support the weight of the drill rig. Two hydraulic hoses will be extended along the shoreline adjacent to the seawall from a hydraulic pump mounted on a 5 foot by 10 foot trailer. The trailer-mounted hydraulic pump will be staged on the upland parcel, on an asphalt surface. One hydraulic hose transports hydraulic fluid to the portable auger rig to turn the auger, the other hydraulic hose transports the heated fluid back to the hydraulic pump for cooling and reuse. Drill cuttings will be shoveled in to a wheelbarrow and transported directly to a 55-gallon DOT storage drum, which will then be tightly sealed and stored on the upland Marine Terminal parcel. Samples from the drums will be collected and submitted for laboratory analysis in order to profile the cuttings for disposal to appropriate disposal facilities. No stockpiling will occur.

Impacts to the shoreline will be minimal as no vehicular traffic will be required to reach the wells. Equipment used for drilling in the immediate vicinity of the monitoring wells includes: hollow stem augers, the hosing, bags of sand, bentonite, and cement, a wheelbarrow, and shovels. Approximately three persons at a time will be working in the vicinity of the wells.

The drilling shall be performed during low tide, at a time when soil disruption caused by drilling will not come in contact with bay water. No project-influenced turbidity is expected to enter Humboldt Bay as a result of this project. Hours of operation will be maximized at low tide; work is estimated for completion within 3-4 days. De-watering of the site will not be necessary.

Topography of the project area is gentle; the slope does not exceed approximately 7 percent. Soils are stable and consist of fine olive gray sands mixed with approximately 35 percent rounded cobbles and approximately 5 percent shell fragments at monitoring wells MW-10 and MW-12, and 100 percent fine olive gray sands and a cemented layer of black sand from 1 inch to 6 inches depth at monitoring well MW-11.

The monitoring wells are located along a line perpendicular from the base of the pier, paralleling a concrete headwall. The wells are approximately 1 to 2 feet from the headwall. A line of steel posts approximately 8 inches in diameter and 4.5 feet in height above ground surface, parallel the concrete headwall at a distance of approximately 3 to 5 feet. A rip rap barrier composed of a wall of large boulders parallels the concrete head wall at a distance of approximately 20 to 25 feet. Eelgrass (*Zostera marina*) beds, observable from the pier between the dock and the shoreline, are located approximately 40 feet from the concrete headwall (and approximately 15 to 20 feet from the rip rap barrier). The rip rap and steel posts are located between the project area and the eelgrass beds which, are considered to be an Environmentally Sensitive Habitat Area (ESHA) in the City of Eureka's Local Coastal Plan. The project is not considered to have any negative effect on the eelgrass beds due to the distance between the monitoring wells and the eelgrass

beds and also due to the rip rap and steel post barriers between the monitoring wells and the eelgrass beds. Please see the attached photos and Figure 2.

Vegetation within a 5 foot radius of monitoring well MW-10 and MW-12, the two wells lowest in elevation and most tidally influenced, consists only of cord grass (*Spartina densiflorus)*, in approximately 20 percent and 15 percent cover, at each respective monitoring well. Vegetation within a 5 foot radius of monitoring well MW-11 consists of 100 percent cover including cord grass, beach grass (*Ammophila arenaria*), American dune grass (*Leymus mollis*), sorrel (*Rumex acetosella*), common vetch (*Vicia sativa*), smooth cat's ear (*Hypochaeris glabra*), and salt bush (*Atriplex patula*). The species within the immediate project area are non-native weedy species, commonly found in disturbed areas with the exception of salt bush, which was noted to exist as 3 percent (%) cover.

Shorebirds are abundant at low tide in the bay among the eelgrass beds, which are located beyond the rip-rap wall barrier. The California Brown Pelican (*Pelecanus occidientalis californicus*) is a state and federally listed endangered species that may be present in the project vicinity. The Brown Pelican occurs seasonally in Humboldt Bay, typically from April through November. A significant pelican roost exists at the mouth of Elk River, well out of the project area, approximately 2,500 feet south. The project is not expected to impact the Brown Pelican. Any federal or state listed anadromous fish species occurring in Humboldt Bay, including Coho (*Onocorhynchus kisutch*), Chinook (*Onocorhynchus tshwytscha*), or Steelhead (*Onocorhynchus mykiss*), would not be expected to be found on the edge of the bay near the project area. These species would presumably stay in deeper areas of the bay and project implementation is not presumed to have any effect on these anadromous species.

A series of permit procedures and agency approvals are expected. The Humboldt Bay Harbor, Recreation, and Conservation District, The California Coastal Commission (Coastal Commission), the Regional Water Quality Control Board, and the Army Corp of Engineers each require a permit authorization process. No permit will be necessary from the City of Eureka or the California Department of Fish and Game (CDFG) as determined by Sidney Olson, City of Eureka, and Vicky Fry, CDFG, respectively. Diane Ashton of National Oceanographic and Atmospheric Administration (NOAA) Fisheries stated that informal consultation would occur with NOAA and no Biological Assessment would be necessary. No mitigation or monitoring plans are deemed necessary as part of the proposed project.

Best Management Practices (BMP's) that will be employed at the project site to minimize the potential for impacts to occur are summarized as follows:

- The auger rig shall be carried to each drill location in separate components and assembled over each hole on top of a plywood mud box, which will confine the drill cuttings and support the weight of the drill rig.
- Drill cuttings will be shoveled in to a wheelbarrow and transported directly to a 55-gallon DOT storage drum, which will then be tightly sealed and stored on the upland Marine Terminal parcel. Samples from the drums will be collected and submitted for laboratory analysis in order to profile the cuttings for disposal to appropriate disposal facilities. No stockpiling will occur.

- The drilling shall be performed during low tide, at a time when soil disruption caused by drilling will not come in contact with bay water. No project-influenced turbidity is expected to enter Humboldt Bay as a result of this project.
- Hours of operation will be maximized at low tide and de-watering of the site will not be necessary.

Responsible Parties
Scott Parsons, Chevron Marine Terminal, Eureka Site Manager, (707) 444-7850
Mark Inglis, Chevron Headquarters Contact, (925) 842-1589
Ian Rob, Contractor, Cambria Environmental Technology, (510) 420-3352
Potential Driller: Clearhart Drilling (707) 568-6095

b) Location

The City of Eureka is located on the northern California coast in Humboldt County, approximately 270 miles north of San Francisco. The Chevron Eureka Marine Terminal and tank farm facility (APN 007-071-013 & APN 007-071-008) are located in Eureka at 3400 Christie Street approximately ¼ of a mile west of Highway 101. Please see Figures 1, 2, and 3, Vicinity Map, Plan View, and Site Plan, respectively.

Replacement of three monitoring wells is proposed for an area along the edge of Humboldt Bay, California on APN 007-071-013 adjacent to the existing Chevron Marine Terminal (APN 007-071-008), as shown in the vicinity map (Figure 1), plan view (Figure 2), site plan (Figure 3), and cross section view (Figure 4).

c) Implementation Schedule:

Monitoring well destruction and construction is proposed to begin in Fall 2005, and last no more than 3 to 4 working days.

d, e) Federal Permits, CEQA Compliance:

Agency	Approval Type	Date Applied	Date Approved	Notes
Humboldt Bay Harbor, Recreation, and Conservation District	Permit	3/10/05	Pending	
	Notice of Exemption	3/31/05	3/31/05	Attached
California Coastal Commission	Coastal Development Permit	3/17/05	Pending	
Army Corp of Engineers	Nationwide Permit	3/10/05	Pending	Attached

HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT

PERMIT

Permit No. 05-05

601 Startare Drive
Woodley Island Marina
P O Box 1030
Eureka, CA 95502-1030

Permittee:

CHEVRON PRODUCTS COMPANY
3400 Christie Street
Eureka, CA 95503

The Board of Commissioners of the **Humboldt Bay Harbor, Recreation and Conservation District** hereinafter referred to as "**District**", having considered the Application herein, number 05-05, received by the **District** on March 11, 2005, and Chevron Products Company, 3400 Christie Street, Eureka, California 95503, hereinafter referred to as "**Permittee**", and the **District** as the lead agency, pursuant to the California Environmental Quality Act of 1970, as amended, having made a determination of Notice of Categorical Exemption dated March 31, 2005 and the Board of Commissioners of the **District** having on April 28, 2005, passed Resolution No. 2005-06 establishing findings relative to the Application by **Permittee** for the replacement of three monitoring wells at the Tank Farm Facility provided for in this Permit, the **Permittee** is hereby authorized to perform the work of improvement, as more particularly described in the Application filed with the **District** and the categorical exemption referred to above.

You are hereby authorized to erect and construct that work of improvement described in the Permit Application of **Permittee** consisting of:

> Replacement of three monitoring wells at the Chevron Tank Farm Facility as more particularly described in the Application filed by **Permittee**.

That the location of the proposed work of improvement shall be located at the foot of Christie Street, being tideland Parcel No. APN 007-071-013 in the City of Eureka, Humboldt County, California.

SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

1. That you promptly report the dates when you start and finish the work authorized by this Permit. IF you find that you cannot complete the work within the time granted by this Permit, please ask for an extension before your Permit expires. If you materially change the plan and scope of the work, it will be necessary for you to submit a new map and request a revision of your Application and plans.

2. That all work authorized by this Permit shall further be subject to the approval of the following public agencies:

   A. United States Army Corps of Engineers San Francisco District
   B. State of California Coastal Commission
   C. State of California Regional Water Quality Control Board, North Coast Region

3. That there shall be no unreasonable interference with navigation by the work herein authorized.

4. That no attempt shall be made by the **Permittee** to interfere or forbid the full and free use by the public of all navigable waters at or adjacent to the work.

5. That the **Humboldt Bay Harbor, Recreation and Conservation District**, its Commissioners, or any officer or employee of the Humboldt Bay Harbor, Recreation, and Conservation **District** shall in no case be liable for any damages or injury of the work herein authorized which may be caused by or result from future operations undertaken by the **Humboldt Bay Harbor, Recreation and Conservation District** for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

6. That neither the **Humboldt Bay Harbor, Recreation and Conservation District**, nor its Board of Commissioners, nor any officer of the **District** shall be liable to any extent for any such injury or damage to any person or property or for the death of any person arising out of or connected with the work authorized by this Permit.

7. That all work herein authorized shall be completed on or before the 28th day of April 2006, and this Permit, if not previously revoked or specifically extended, shall cease and be null and void and terminate on the 28th day of April 2006.

8. That the Board of Commissioners of the **District** may revoke this Permit at any time upon a finding by the **District** of a violation by the **Permittee** of any condition of this Permit.

9. That the **Permittee** shall comply with any regulations, condition, or instructions affecting the work hereby authorized if and when issued by the Federal Water Pollution Control Administration and/or the State of California Water Resources Control Agency having jurisdiction to abate or prevent water pollution. Such regulations, conditions, or instruction in effect or prescribed by Federal or State Agencies are hereby made a condition of this Permit.

10. That neither the **Humboldt Bay Harbor, Recreation and Conservation District**, nor its Board of Commissioners, nor any officer of the **District** shall be liable to any extent for the injury or damage to any person or property or for the work authorized by this Permit, and the **Permittee** shall

indemnify and hold harmless the **District**, its Commissioners and officers free and harmless from any liability for any such injury, death or damage.

11. That **Permittee** shall furnish to the **Humboldt Bay Harbor, Recreation and Conservation District** a written annual progress report and upon completion, a written completion report describing the completion of the project. **Permittee** shall at all times notify the **Humboldt Bay Harbor, Recreation and Conservation District** in writing of all locations, including new locations, in Humboldt Bay, that **Permittee** proposes to install the uses permitted herein, prior to said installation.

12. That as a condition to the issuance of this Permit, **Permittee** agrees to indemnify and hold harmless **Humboldt Bay Harbor, Recreation and Conservation District** from an against any and all liability, loss, or damage **Humboldt Bay Harbor, Recreation and Conservation District** may suffer from claims and demands for attorneys' fees, costs of suit, and costs of administrative records made against **Humboldt Bay Harbor, Recreation and Conservation District** by any and all third parties as a result of third party environmental actions against **Humboldt Bay Harbor, Recreation and Conservation District** arising out of the subject matter of this Permit, including, but not limited to attorneys' fees, costs of suit, and costs of administrative records pursuant to the California Code of Civil Procedure §1021.5 or any other applicable local, state or federal laws, whether such attorneys' fees, costs of suit, and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial appeal or arbitration of claims for attorneys' fees, costs of suit, and costs of administrative records in connection with the subject matter of this Permit.

13. That this Permit is valid as of the 28th day of April 2006, and is made subject to the **Permittee** approving and agreeing to the conditions above set forth and executing said approval as hereinafter provided.

EXECUTED on this 28th day of April 2005, by authority of the Board of Commissioners of the **Humboldt Bay Harbor, Recreation and Conservation District**.

Ronnie Pellegrini

RONNIE PELLEGRINI, President
Board of Commissioners
Humboldt Bay Harbor, Recreation and Conservation District

Chevron Products Company, Permittee, in the above Permit, hereby accepts and agrees to all of the conditions hereinabove set forth. **Permittee** shall indemnify and hold harmless the **Humboldt Bay Harbor, Recreation and Conservation District**, its Board of Commissioners, officers and employees from any and all claims of any nature arising from the performance of and work of improvement contained in the Application for injury, death or damage to any person or property.

Chevron Products Company, Permittee, in the above Permit, agrees to indemnify and hold harmless **Humboldt Bay Harbor, Recreation and Conservation District,** its Board of Commissioners, officers and employees from and against any and all liability, loss or damage **District** may suffer from claims and demands from attorneys' fees; costs of suit and costs of administrative records made against **District** by any and all third parties as a result of third party environmental actions against **District** arising out of the subject matter of this Permit including, but not limited to, attorneys' fees, costs of suit and costs of administrative records pursuant to the California Code of Civil Procedure §1021.5 or any other applicable local, state or federal laws, whether such attorneys fees, costs of suit and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal or arbitration of claims for attorneys' fees, costs of suit and costs of administrative records in connection with the subject matter of this Permit.

Dated: April _____ 2005

CHEVRON PRODUCTS COMPANY

By _____

Its _____

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