

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200
FAX (415) 904-5400



Click here to go to
original staff report

W10a

February 11, 2014

TO: Coastal Commissioners and Interested Parties

FROM: Alison J. Dettmer, Deputy Director/Tom Luster, Senior Environmental Scientist – Energy, Ocean Resources, and Federal Consistency Division

SUBJECT: **ADDENDUM** to Staff Report for Coastal Development Permit Application 9-13-0621 (Pacific Gas & Electric Company) – Humboldt Bay Power Plant Canal Remediation, near the City of Eureka, Humboldt County

This addendum provides correspondence received and makes applicant-requested revisions to the above-referenced staff report, including several timing changes for reviewing required plans and minor corrections to reflect changes in an updated project description. The revisions do not change staff’s recommendation that the Commission **conditionally approve** the coastal development permit application.

CORRESPONDENCE RECEIVED

- Humboldt Baykeeper, February 10, 2014

REVISIONS TO STAFF REPORT

Staff’s recommended revisions are shown below in ~~double strikethrough~~ and **bold underline** text, with revisions to **Special Conditions** provided first, followed by revisions to the Findings.

REVISIONS TO STAFF’S RECOMMENDED SPECIAL CONDITIONS

Special Condition 2, page 5. As initially proposed, **Special Condition 2** would require PG&E to submit several approvals before starting construction activities. PG&E requested the requirement be changed to “prior to any project-related grading or filling,” which will allow it to begin site mobilization and site preparation, but will still prevent grading or filling in coastal waters until it secures the approvals. Staff therefore recommend **Special Condition 2** be modified as follows:

“Other Approvals. PRIOR TO ~~STARTING CONSTRUCTION ACTIVITIES~~ ANY PROJECT-RELATED GRADING OR FILLING, PG&E shall provide to the

Executive Director a copy of each of the following permits and approvals, or evidence that the permit or approval is not needed:

- a. Humboldt Bay Harbor, Recreation, and Conservation District: approved development permit.
- b. North Coast Regional Water Quality Control Board: approved Construction General Stormwater Permit and Section 401 Water Quality Certification...”

Special Condition 3, pages 5-6. As initially proposed, **Special Condition 3** would have required PG&E to submit its public access mitigation plan “prior to permit issuance.” However, the project’s effects on public access will not occur for several months into project activities, so PG&E requested the plan be required prior to the activities requiring temporary closure of the shoreline trail. PG&E also requested the condition be changed to reflect that the proposed mitigation would take place on property belonging to the Humboldt Bay Harbor, Recreation, and Conservation District. Staff therefore recommend **Special Condition 3** be modified as follows:

“Public Access and Recreation. PRIOR TO STARTING CONSTRUCTION ACTIVITIES REQUIRING CLOSURE OF THE SHORELINE TRAIL, PG&E shall provide for Executive Director review and approval a proposed *Buhne Point Vista Improvement Plan* that describes PG&E’s proposed measures to enhance public access at the Buhne Point vista and trail. The Plan shall include detailed descriptions of the following:

- Existing conditions of the vista and trail area, including site and trail elevations, habitat and vegetation characteristics, and dimensions of the existing retaining wall, bench, trail, and other public access amenities.
- Proposed changes and improvements to those existing amenities, including:
 - Plans and elevations of the proposed replacement retaining wall and bench.
 - Plans and elevations of the proposed new safety barrier. The safety barrier shall be designed to minimize loss of existing views from the overlook area.
 - Plans and elevations of any proposed changes to the existing trail, including any changes that may be needed for access to construct the above proposed improvements.
 - A description of any changes to, or loss of, habitat or vegetation resulting from the above proposed improvements.
- Construction schedule for the proposed improvements.
- **The Humboldt Bay Harbor, Recreation, and Conservation District’s** ~~M~~aintenance measures that will be implemented to maintain the amenities.
- Legal mechanism(s) **implemented by the Humboldt Bay Harbor, Recreation, and Conservation District** to ensure perpetual protection of the public accessway.
- Written approval from the Humboldt Bay Harbor, Recreation, and Conservation District to implement elements of the proposed Plan.

PG&E shall not close the trail until it receives Executive Director approval of the Plan. PG&E shall undertake development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.”

Special Condition 4, page 6. As initially proposed, **Special Condition 4** would have required PG&E to obtain Executive Director approval of its proposed compensatory mitigation plan prior to permit issuance. Since the dredging and filling that will affect those waters will occur later in the project, PG&E requested the timing be changed to “prior to dredging or filling” in those waters. PG&E also recently modified its proposed plan and requested the condition be changed to reflect updated impact and mitigation totals. Staff therefore recommend the following modifications to **Special Condition 4**:

“Coastal Waters Compensatory Mitigation. PRIOR TO ~~PERMIT ISSUANCE~~ DREDGING OR FILLING ACTIVITIES, PG&E shall submit, for Executive Director review and approval, a Coastal Waters Compensatory Mitigation Plan that is consistent with the mitigation goals, objectives, performance standards, and monitoring requirements described in PG&E’s August 2013 *Project Description and Coastal Resource Assessment – Humboldt Bay Power Plant Intake and Discharge Canal Remediation Project* and the ~~November 11~~ December 9, 2013 *Biological Mitigation and Monitoring Plan for the Humboldt Bay Power Plant Canal Remediation Project*, and that is modified to clarify and include the following:

- The Plan shall provide for a total of at least ~~1.4~~ 1.7 acres of created and enhanced intertidal and wetland habitat at the Buhne Point Wetlands Preserve and the Alpha Road Parking Area, and shall include detailed descriptions of proposed site topography, ~~construction drawings~~ grading and planting plans, performance standards, monitoring and maintenance requirements, contingency plans, and schedules to implement the mitigation. Mitigation elements for the proposed “Mit-6” area of Buhne Point Wetlands Preserve shall be consistent with those in the *Buhne Point Wetlands Preserve Mitigation and Monitoring Plan for Humboldt Bay Repowering Project*, previously approved by the Commission pursuant to Coastal Development Permits E-07-005 and E-08-003.
- The Plan shall identify the legal mechanisms proposed to ensure permanent protection of the mitigation sites – e.g., conservation easements, deed restrictions, or other methods.

PG&E shall not conduct dredging or filling until it receives Executive Director approval of the Plan. PG&E shall undertake development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.”

Special Condition 7, page 7. This condition should be corrected as follows:

“All lighting structures and fixtures installed for use during the project and visible from public areas, including shoreline areas of ~~San Diego~~ Humboldt Bay, shall be painted or otherwise finished in neutral tones that minimize their visibility from those public areas.”

REVISIONS TO STAFF'S RECOMMENDED FINDINGS

Project Description and Purpose, page 8. Add the following bullet to footnote 1:

- **“CDP E-08-008 (August 2008) for the installation of 12 modular office buildings, a radiation portal monitor and materials storage and construction staging areas.”**

Canal Dewatering, page 10, third bullet. PG&E requested the following corrections in the description of its canal dewatering plans:

- **“Canal Dewatering:** At both canals, PG&E will first isolate the existing power plant piping from the canals and redirect surface drainage away from the canal areas. PG&E will also install temporary structures in each canal to isolate the work areas from nearby tidal waters. For the intake canal, PG&E will install a coffer dam or similar structure about ~~300~~ **380** feet from the power plant intake. For the discharge canal, PG&E will plug the four outfall pipes that extend beneath the riprap. ~~PG&E will then dewater both canals and route the water, as necessary,~~ **Subject to DTSC and Regional Board sampling and testing requirements, and once the temporary structures are in place to isolate the canals from Bay waters, PG&E will pump water out of the canals and back into Humboldt Bay to achieve initial dewatering. Any additional water resulting from the dewatering of sediment, groundwater intrusion, and stormwater will be collected and transferred** to the site's existing Groundwater Treatment System...”

Waste volumes, page 11, third paragraph. PG&E requested the following corrections in the description of waste it expects to generate during the project:

“The project will also be subject to the waste management activities being conducted as part of other elements of PG&E's power plant demolition and decommissioning projects, including soil sampling, testing, and handling, and treatment of stormwater and groundwater. PG&E expects that project activities will generate about 9,000 cubic yards of ~~soil~~ **contaminated sediment**, 1,500 cubic yards of concrete waste, and the four outfall pipes **for disposal off site**. Pursuant to DTSC requirements, PG&E will sample and test these materials to determine whether they require offsite transport and disposal or can be re-used onsite. Where feasible, PG&E will re-use soil, concrete, riprap, and other materials that tests show are clean enough for onsite uses.”

Project timing, staging and work effort, page 11, first paragraph. PG&E requested the following corrections to reflect recent changes in the project description:

“PG&E plans to start site preparation in early 2014 and expects project activities to occur over about a ~~14-month~~ **4-year** period. ~~Much of the remediation work at the two canals will be done concurrently~~ **The remediation of the discharge canal will begin first**, with removal of sediments and structures ~~at both canals~~ starting in mid-2014 and expected to end by early 2015. PG&E expects to use the discharge canal area for temporary soil storage until the end of decommissioning, which is currently planned for no later than

20189. Remediation of the intake canal is anticipated to begin in 2018 or sooner. The wetland creation of the Alpha Road Parking area and MIT-6 would occur within the same timeframe.

Other Agency Approvals and Consultations, page 12, last bullet and subsequent paragraph. PG&E requested the following changes to reflect that the facility is no longer subject to an Industrial Discharge permit from the Regional Water Quality Control Board and to reflect the above-referenced change to **Special Condition 2**:

- “**North Coast Regional Water Quality Control Board:** Project activities will be subject to the Regional Board’s Construction General Permit No. 12C357418, ~~National Pollutant Discharge Elimination System (NPDES) Permit No. 0005622~~, and Section 401 Water Quality Certification.

Special Condition 2 requires that PG&E submit, prior to ~~starting onsite project activities any project-related grading or filling~~, proof that it has obtained the above permits or documentation from the agencies that a permit is not needed.”

Public Access and Recreation, page 14, first full paragraph:

“Also adjacent to the project site is another public accessway – the Buhne Point Vista Trail, which is a short, unimproved trail on Harbor District property just to the south of the PG&E site. It leads from King Salmon ~~Boulevard~~ **Avenue** to a bench and scenic overlook about forty feet above the Bay. **Above** ~~the~~ overlook area is ~~also a~~ designated ~~as a~~ tsunami evacuation point for nearby residents and workers.

Public Access and Recreation, page 14, last sentence of second full paragraph:

“The westernmost portion of the trail extending from King Salmon ~~Boulevard~~ **Avenue** to within about two hundred feet of the canal would remain open.”

Public Access and Recreation, Mitigation, page 14, end of last paragraph, continuing to page 15. The following change is to provide consistency with the recommended modification to **Special Condition 3** above:

“PG&E proposes to replace the existing retaining wall and bench with a similarly-sized concrete wall and bench. PG&E would also install a safety barrier at the edge of the steep slope, both to improve safety and to reduce creation of informal trails on the slope. PG&E has not yet developed a construction-level design of these improvements; however, it proposes to submit, prior to ~~starting its canal remediation work~~ **temporary closure of the shoreline trail**, a *Buhne Point Vista Improvement Plan* that provides the proposed design and a schedule to complete the improvements. To implement this proposal and to ensure adequate public access is provided and maintained, **Special Condition 3** requires PG&E to submit a plan that provides a detailed description of the existing conditions of the trail and overlook area, including existing vegetation in the area, site and trail elevations, dimensions of the existing retaining wall and bench, and other characteristics. The Plan is also to include a detailed description of the proposed

improvements, including a site plan and elevations of the area with the proposed improvements, as well as construction-level drawings of the improvements to be installed. The Plan is to also illustrate that the proposed safety barrier is designed to minimize the loss of views from the overlook area. PG&E states that it has received verbal approval from the Harbor District for the proposed work; however, **Special Condition 3** also requires PG&E to submit written approval of the proposed improvements from the Harbor District and to ~~provide for~~ **describe any mechanism(s) implemented by the Harbor District to ensure** perpetual legal protection of the accessway.”

Protection of Coastal Waters, Wetlands, and Sensitive Habitat, page 17, end of first paragraph. These revisions more accurately describe the methods and requirements for dewatering the canals:

“PG&E will conduct similar relocation activities for Northern red-legged frogs and any egg masses that may be in the area, which would be removed to a pond in PG&E’s nearby Buhne Point Wetlands Preserve (see description below). ~~PG&E will sample and test water within the work areas before dewatering and will route any water that exceeds the cleanup standards through~~ **Once the water control structures are in place, PG&E will pump water out of the canals and directly into Humboldt Bay to achieve initial dewatering. Any additional water resulting from the dewatering of sediment, groundwater intrusion, and stormwater will be collected and transferred to** the existing onsite Groundwater Treatment System, which was installed several years ago to **treat groundwater and stormwater that is** ~~treat contaminated water as required by DTSC. PG&E will also be~~ subject to a construction stormwater permit from the North Coast Regional Water Quality Control Board.”

Adverse Effects on Eelgrass, Wetlands, and Sensitive Habitat, pages 17-19. The following revisions are to reflect area totals in the updated project description PG&E provided in its December 2013 *Biological Mitigation and Monitoring Plan for the Humboldt Bay Power Plant Canal Remediation Project*.

Page 17, first paragraph, second sentence:

“The intake canal work area includes about ~~721~~ **3,049** square feet (0.07 acres) of eelgrass and the discharge canal work area contains about ~~815~~ **828** square feet (0.019 acres) of eelgrass, for a total of ~~0.035~~ **0.089** acres.”

Page 19, second full paragraph, last sentence:

“The project would result in about ~~0.84~~ **1.45** acres of wetland creation and ~~0.29~~ **0.46** acres of wetland enhancement, which will include about ~~0.37~~ **0.38** acres of eelgrass habitat.”

Page 19, third full paragraph, first three sentences:

“To compensate for a permanent loss of about 0.24 acres of wetlands and ~~0.035~~ **0.089** acres of eelgrass, and a temporary reduction of about 0.25 acres of Bay habitat, the two mitigation sites would provide a total of about ~~1.4~~ **1.7** acres of created and enhanced

wetland habitat. This results in a mitigation ratio of about ~~5:1~~ 7:1 when considering just the permanent losses and a ratio of about ~~2.6:1~~ 3.6:1 when considering both permanent and temporary losses together. The proposed mitigation ratio for eelgrass habitat – i.e., creation of ~~0.37~~ 0.038 acres for the loss of about ~~0.035~~ 0.089 acres – is greater than ~~10:1~~ 4:1.”

Appendix A, Substantive File Documents, page 27. This is to replace the initially-referenced document with PG&E’s updated document:

Stillwater Sciences, *Biological Mitigation and Monitoring Plan for the Humboldt Bay Canal Remediation Project* ~~Agency Review Draft, November~~ **December 2013**.

Exhibits 2 and 5. PG&E provided two exhibits (attached) from its updated Biological Plan to replace the initially-provided exhibits.

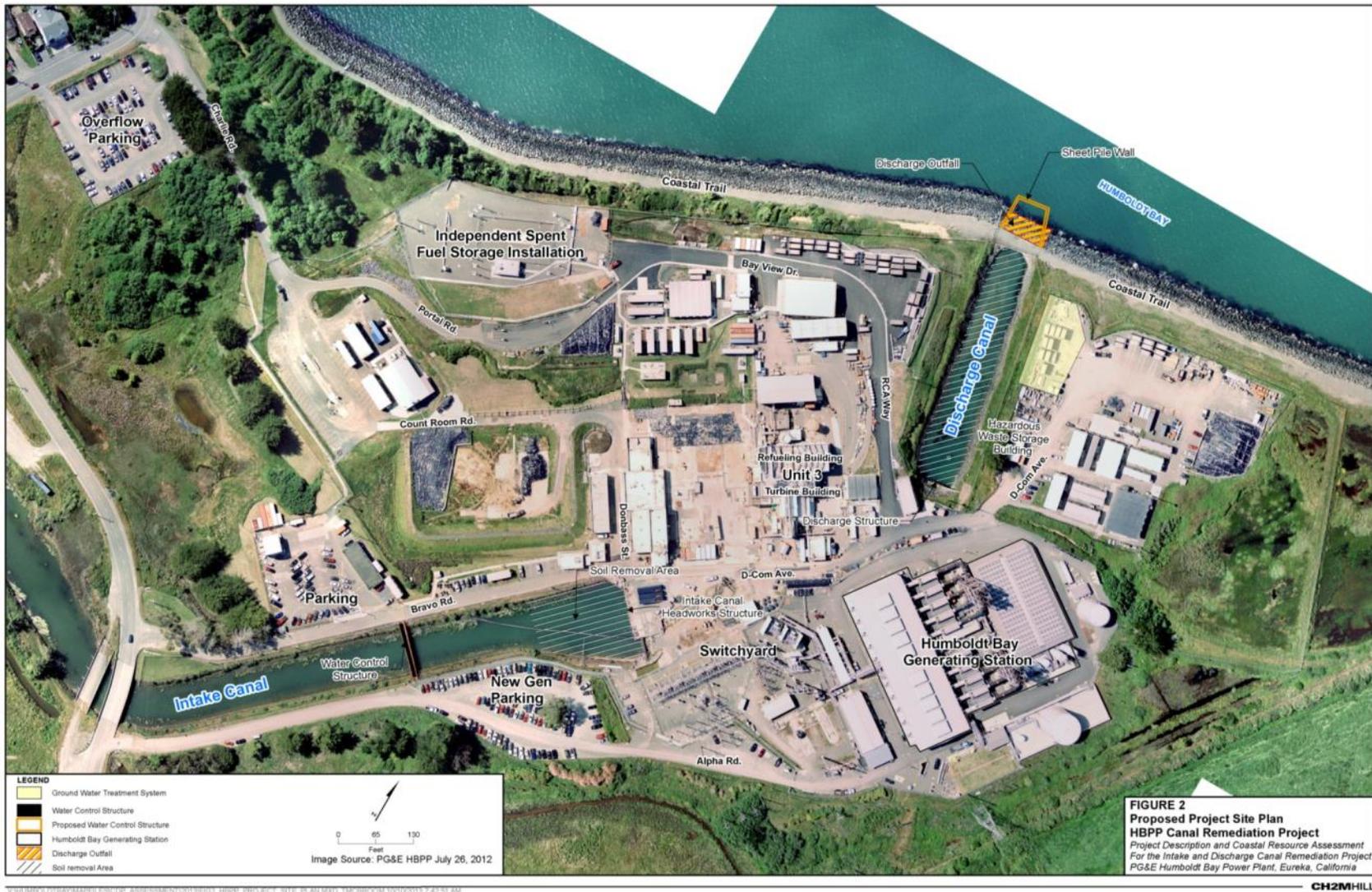


Figure 2. Project area and proposed soil removal areas. Source: Canal Remediation Project Description (CH2M Hill 2013).

9-13-0621
 EXHIBIT 2

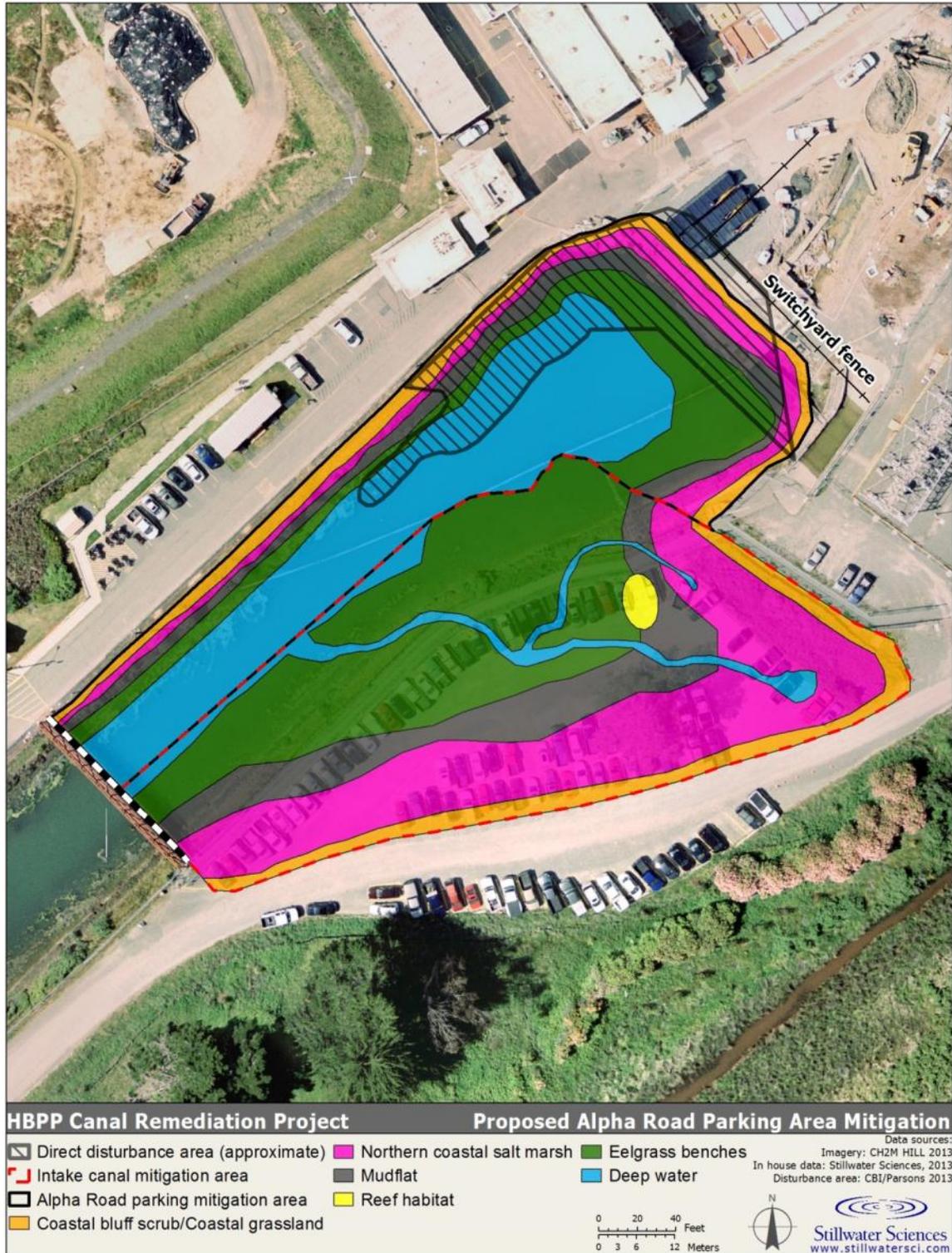


Figure 10. Proposed conceptual mitigation design for the Alpha Road parking area (plan view; shown with proposed intake canal restoration).

9-13-0621
EXHIBIT 5



February 10, 2014

Mr. Thomas Luster
California Coastal Commission
45 Fremont, Suite 2000
San Francisco, CA 94105-2219

Re: Humboldt Bay Power Plant Canal Remediation, Application No. 9-13-0621

Dear Mr. Luster,

On behalf of the board, staff and supporting members of Humboldt Baykeeper, these comments are submitted for the Coastal Commission's consideration on the Coastal Development Permit for PG&E's Humboldt Bay Power Plant Canal Remediation, agenda item W10a for the Feb. 12, 2014 Commission hearing.

Humboldt Baykeeper was launched in October 2004 to safeguard our coastal resources for the health, enjoyment, and economic strength of the Humboldt Bay community through education, scientific research, and enforcement of laws to fight pollution.

We are pleased that the remediation of the intake and discharge canals is moving forward. The Humboldt Bay Power Plant (HBPP) included the first commercially-licensed nuclear power plant in the U.S. which has not operated since going offline over 30 years ago. Its proximity to Humboldt Bay and the communities of King Salmon and the greater Eureka areas has been of great concern as the reactor, spent fuel pool, etc. sat awaiting decommissioning for decades. It is a great relief to be nearing the end of the long decommissioning process.

Humboldt Baykeeper's primary concern with the proposed project is regarding the wetland mitigation proposed at and adjacent to the intake to the power plant, which was revealed to have the second-highest level of Cesium-137 in the sampling results presented in the response to our comments on the Initial Study and Mitigated Negative Declaration (attached). We understand that federal pre-emption precludes the Commission from analyzing remediation plans for the site, but we urge the Commission to take a close look at the sampling results in the attached response to our comments (pdf page 5 of 9). The Radiological Characterization Report developed for HBPP by Enercon states that "The results of the samples indicate an increase in sediment contamination in the first half of the canal over the last

decade.” (p. 22, Radiological Characterization Report, HBPP-RPT-001, November 21, 2008).

We are concerned that review of the proposed wetland mitigation identified as the **Alpha Road Parking Mitigation Area** (Exhibit 5) has been done without considering the Cesium-137 detection of 22.39 pCi/g. We bring this to the Commission’s attention so as to avoid segmentation of review by the various agencies with different authority over the project, which includes the Nuclear Regulatory Commission, Department of Toxic Substances Control, Regional Water Quality Control Board, etc. as well as the Coastal Commission. The Alpha Road Parking Mitigation Area may be well-suited to restoration of bay habitat such as salt marsh, mudflats, and eelgrass beds, but our hope is that this determination will not be made in absence of information on the extent of contamination and proposed remediation prior to restoration efforts.

We are also concerned with potential radionuclide contamination of bay sediments and the methodology used to delineate the area to be remediated, particularly off-site at the point of discharge from the discharge canal. We are concerned that radionuclides may be present within bay sediments from effluent discharges over the years, and would like to know how PG&E and its consultants determined the extent of contamination. Sediment sampling results have not been presented that support the extent of remediation being proposed at the discharge.

We look forward to the next phase of decommissioning, which will entail restoration of the entire site. We appreciate the diligence of the numerous agencies that endeavor to ensure the long-term health and safety of Humboldt Bay residents, particularly those who gather and eat mussels and other bivalves, as well as the wildlife that relies on mollusks and other invertebrates.

Thank you for the opportunity to comment on this matter.

Sincerely,

_____/s/_____
Jennifer Kalt, Policy Director
Humboldt Baykeeper
1385 Eighth Street, Suite 228
Arcata, CA 95521
(707) 499-3678
jkalt@humboldtbykeeper.org

Attached:

Excerpt the Humboldt Bay Harbor, Recreation, and Conservation District’s Jan. 23, 2014 Mitigated Negative Declaration hearing:
PG&E_canal_MND_response_to_comments_Baykeeper_Section1-22-14. pdf

“The number of daily haul truck trips on these routes must be identified;”

The intake and discharge canal sediment and construction debris removal activity was estimated to yield up to 20 shipments per week during the peak period of transportation. This is nominally 5 trucks accessing the HBPP site per day during a 4 day work week. The trucks are planned to deliver an empty container and leave with a filled container resulting in a consistent flow of containers and minimizing the number of trucks arriving and departing the site.

“The Peak hour traffic impacts of these truck trips on City Trips,...”

Response

Transportation to and from the HBPP site is conducted during normal business hours (e.g. generally during daylight hours). There has been an occasional truck that has departed the site after normal business hours and this may happen for the canal work scope. The vehicles used for hauling HBPP canal sediment and construction debris will be typical of semi-truck trailer rigs seen on highway 101 within the city limits. It is anticipated to have a minimal change to existing noise receptors or health hazards to City residents. Health hazards associated with hauling this type of material to the facilities is regulated by the DOT and the NRC. The shipments are required to meet DOT packaging requirements (e.g. the package can be properly secured during transport; the package is capable of withstanding the effects of normal conditions during transport). The amount of radioactive material in each shipment is low enough that the regulators do not require placards (radioactive signs on the transport vehicle) warning the public of a hazard. Prior to the shipment being released from the site, rigorous characterization ensures that any radioactive dose or contamination seen at the package surface is below the requirements established for members of the public. In short, prior to allowing the truck to leave the site we are required by Federal regulation to be protective of the public.

These responses have been shared with Eureka City staff, who have indicated that they address their questions and are satisfied with the responses.

Humboldt Baykeeper Comments/Questions:

***Are there sampling results that support the extent of remediation being proposed?
How far from the HBPP have Bay sediments been sampled for radionuclides?***

Response.

Radionuclide sampling was conducted in 2013 and 1997, and the locations and results are presented in the maps and table following this discussion.

The thresholds used to determine whether remediation is required are 7.9 pCi/gm (picoCuries per gram) for Cs-137 and 3.8 pCi/gm for Co-60. These numbers were developed in PG&E’s License Termination Plan (LTP) and correlate to a hypothetical dose to a “resident farmer” that may live on the site, grow crops, eat the food, raise cattle, drink groundwater, and breath dust; and still maintain a dose to that hypothetical individual of less than 25 millirem (mrem)/per year. The NRC is reviewing the LTP, and once the LTP is approved, these will formally set the official clearance criteria. The

process of developing these numbers is well defined and PG&E expects little if any changes to them through the NRC approval process.

The sampling data presented here show that all areas with detectable contamination above the thresholds described above are being removed as part of this project, and that areas surrounding the proposed project do not require remediation for radionuclides.

The 2013 map is labeled as such, and the results are in the accompanying table. The other maps are all from 1997 sampling and the results are presented on the map itself. The following key will help interpret the maps:

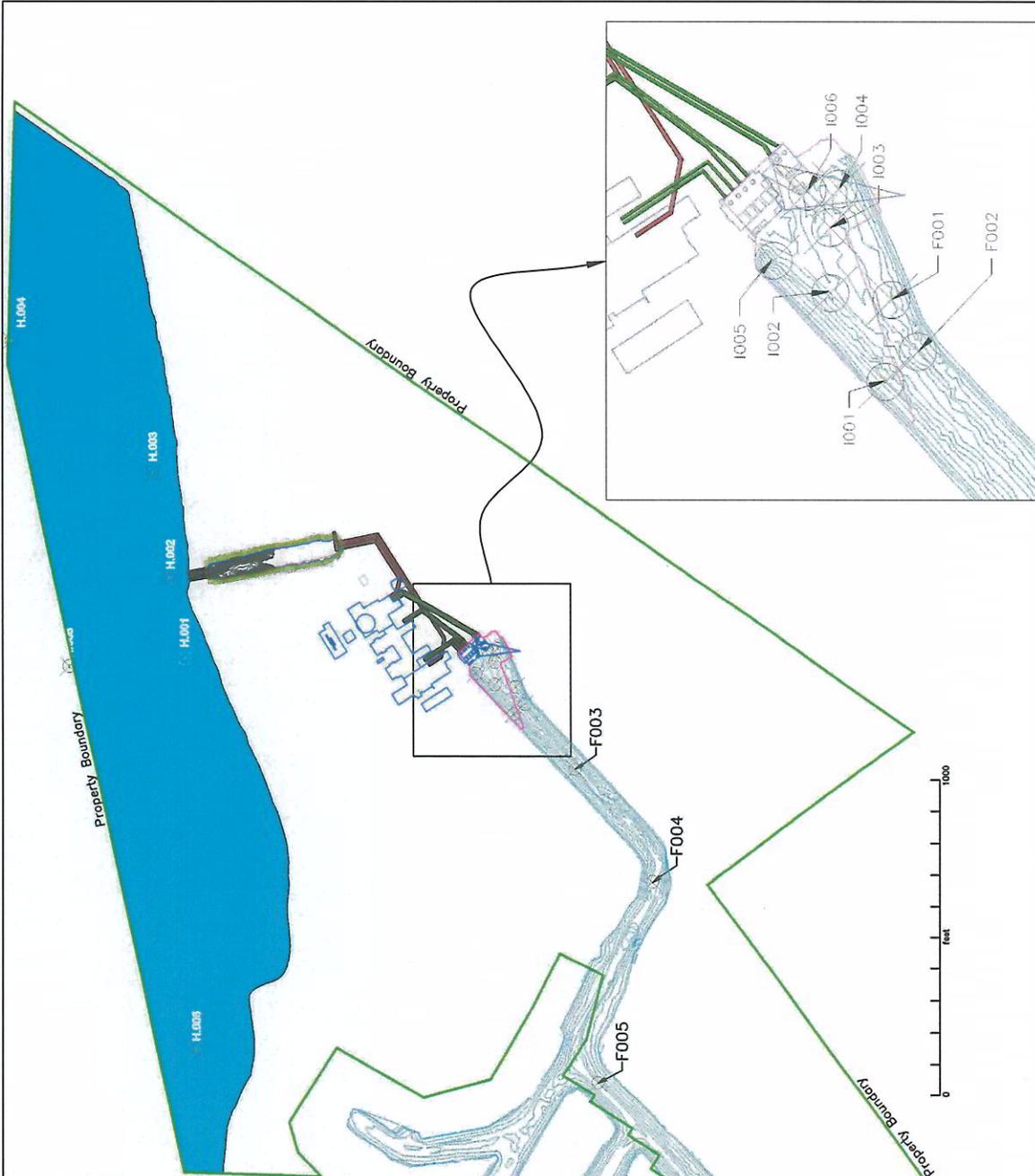
- All results are in picocurie/gram (pCi/gm)
- TD indicates the tidal depth where the sample was taken.
- ND stands for Non-Detected

Sampling conducted outside the Discharge canal in 1997 shows no detection of radionuclides. The 1997 sampling shows detectable Cs 137 and CO 60 near the mouth of Fisherman's channel. PG&E noted that these levels were below the draft threshold for remediation, the Cs-137 values were at the expected range for atmospheric fallout from weapons testing and reactor accidents (i.e., Chernobyl), and that they suspect that the Co-60 was a false positive (this happens sometimes with the methods used). The 2013 sampling did not detect any radionuclides in the Fisherman's Channel mouth area.

RE: extent of sampling in Humboldt Bay

PG&E's License Termination Plan contains a full summary of the historical site assessment and radiological characterization data in Chapter 2. Chapter 5 describes the final radiological survey work that will be done as part of the plant closure process. These data are available at the NRC website via their search function using the search codes: ML13130A009 and ML131300160.

Sample	Eastings*	Northings*
Intake Canal		
i001	5949115.63	2160643.30
i002	5949209.84	2160702.73
i003	5949280.42	2160702.73
i004	5949321.23	2160693.72
i005	5949245.13	2160763.86
i006	5949319.10	2160727.63
Fisherman's Channel		
f001	5949202.79	2160635.51
f002	5949147.77	2160608.10
f003	5948934.67	2160448.72
f004	5948580.10	2160201.60
f005	5947940.80	2160375.30
f006	5946753.30	2159278.80
Humboldt Bay		
h001	5949291.35	2161666.32
h002	5949548.81	2161746.45
h003	5949877.09	2161799.86
h004	5950299.11	2162252.11
h005	5949265.91	2162066.31
h006	5948043.89	2161660.80



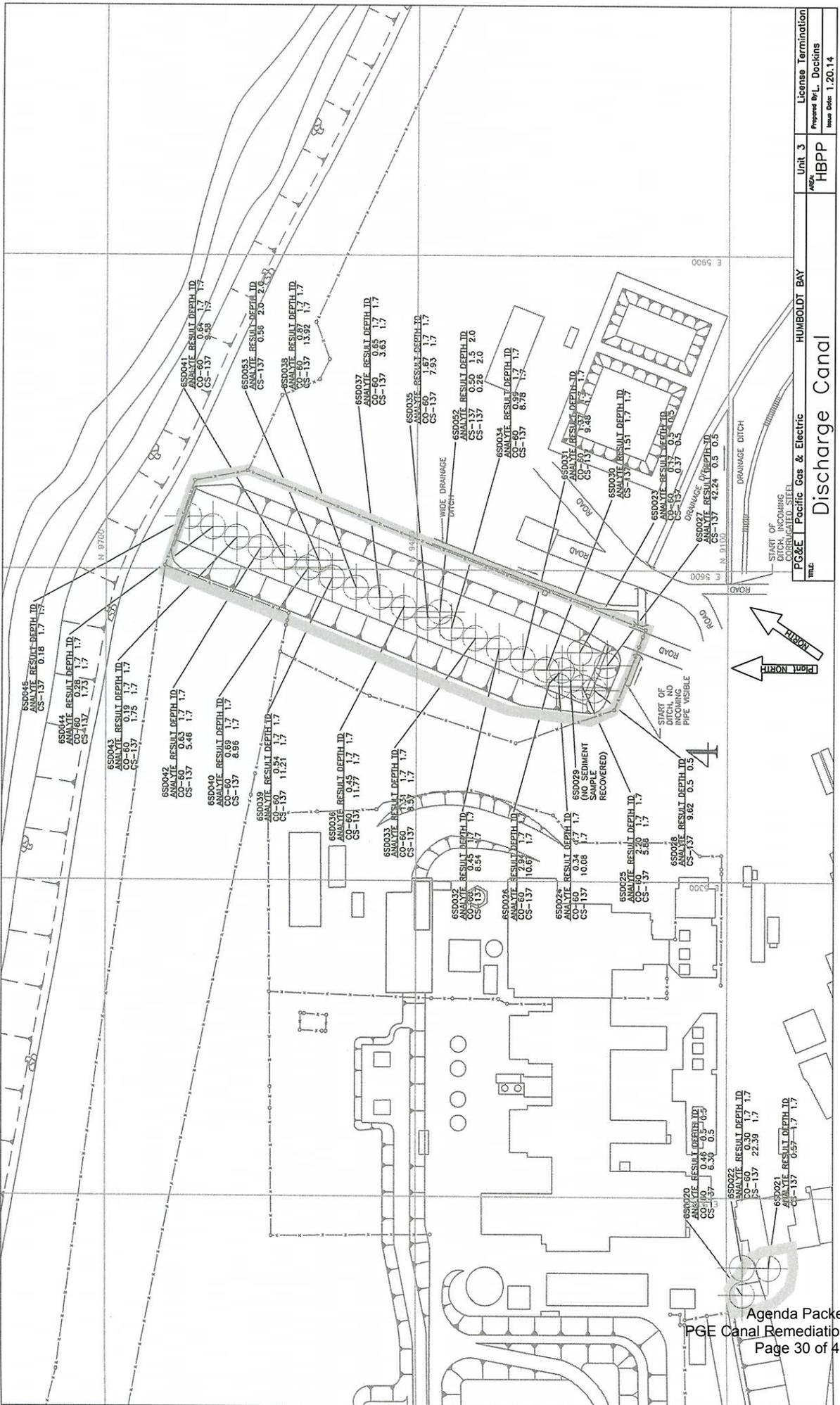
PG&E	Pacific Gas & Electric	HUMBOLDT BAY	Unit 3	License Termination
TITLE		HBPP-CHAR-INT/FSH/HBB	AREA Under Water	Prepared By: B. ENDICOTT Issue Date: 06-18-2013

2013 Characterization Sampling

Map Locator	Sample Number	Results
i001	INT-01-01-C-B-001	No non-natural radionuclides* identified above the LLD**
i002	INT-01-01-C-B-002	No non-natural radionuclides identified above the LLD
i003	INT-01-01-C-B-003	Cs-137 identified at 0.309 pCi/g (Cs-137 LLD = 0.095 pCi/g)
i004	INT-01-01-C-B-004	No non-natural radionuclides identified above the LLD
i005	INT-01-01-C-B-005	Cs-137 identified at 2.69 pCi/g (Cs-137 LLD = 0.092 pCi/g)
i006	INT-01-01-C-B-006	No non-natural radionuclides identified above the LLD
F001	FSH-01-01-C-B-001	Cs-137 identified at 0.153 pCi/g (Cs-137 LLD = 0.044 pCi/g)
F002	FSH-01-01-C-B-002	No non-natural radionuclides identified above the LLD
F003	FSH-01-01-C-B-003	No non-natural radionuclides identified above the LLD
F004	FSH-01-01-C-B-004	No non-natural radionuclides identified above the LLD
F005	FSH-01-01-C-B-005	No non-natural radionuclides identified above the LLD
F006	FSH-01-01-C-B-006	No non-natural radionuclides identified above the LLD
H001	HBB-01-01-C-B-001	No non-natural radionuclides identified above the LLD
H002	HBB-01-01-C-B-002	No non-natural radionuclides identified above the LLD
H003	HBB-01-01-C-B-003	No non-natural radionuclides identified above the LLD
H004	HBB-01-01-C-B-004	No non-natural radionuclides identified above the LLD
H005	HBB-01-01-C-B-005	No non-natural radionuclides identified above the LLD
H006	HBB-01-01-C-B-006	No non-natural radionuclides identified above the LLD

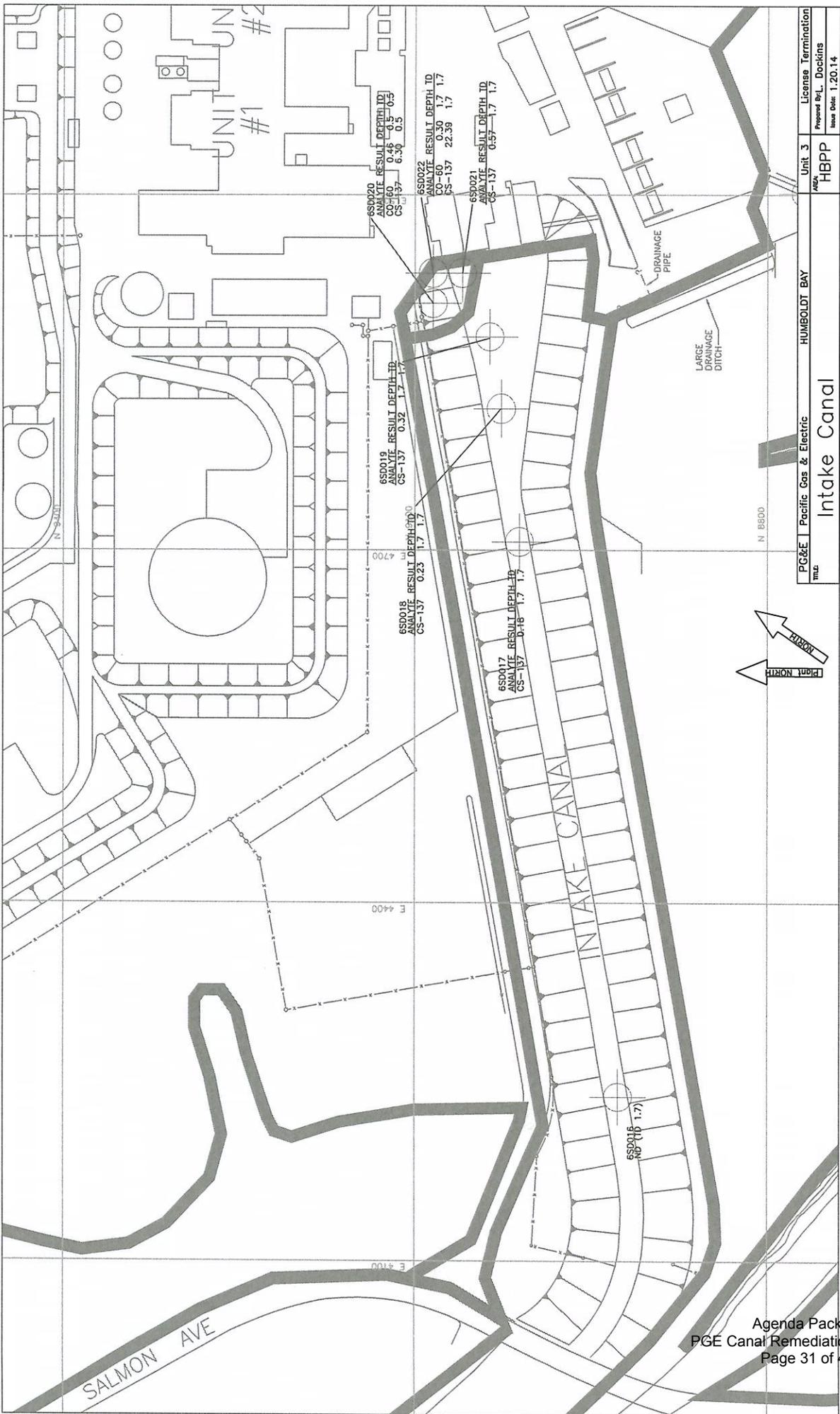
* Non-natural radionuclides (i.e. plant-related nuclides) = Co-60, Nb-94, Ag-108m, Cs-134, Cs-137, Eu-152, Eu-154, Eu-155, Np-237 and Am-241

** LLD = Lower limit of detection for the analysis

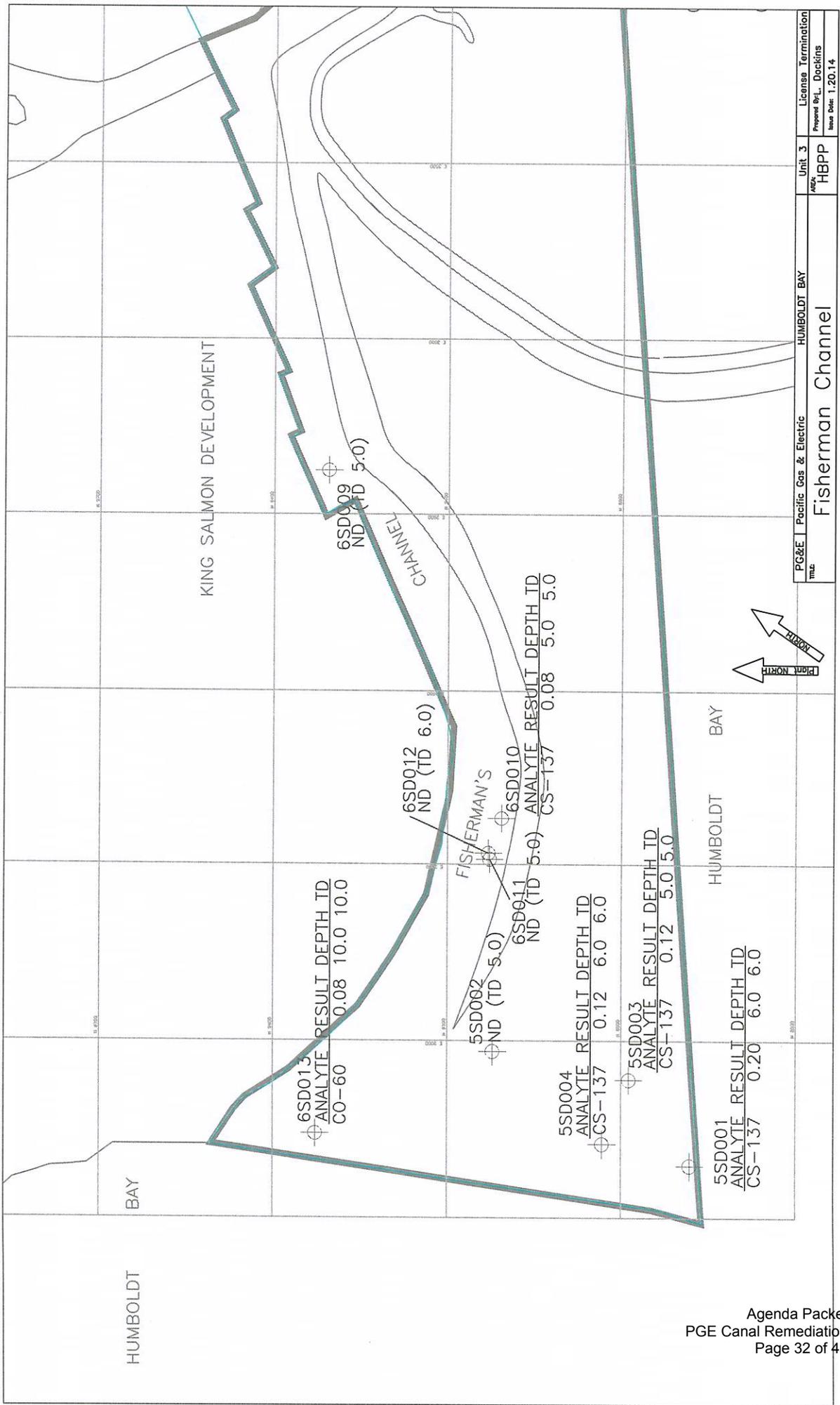


PC&E Pacific Gas & Electric	Unit 3	License Termination
m&e	HBPP	Prepared By: L. Dockins
		Issue Date: 1.20.14

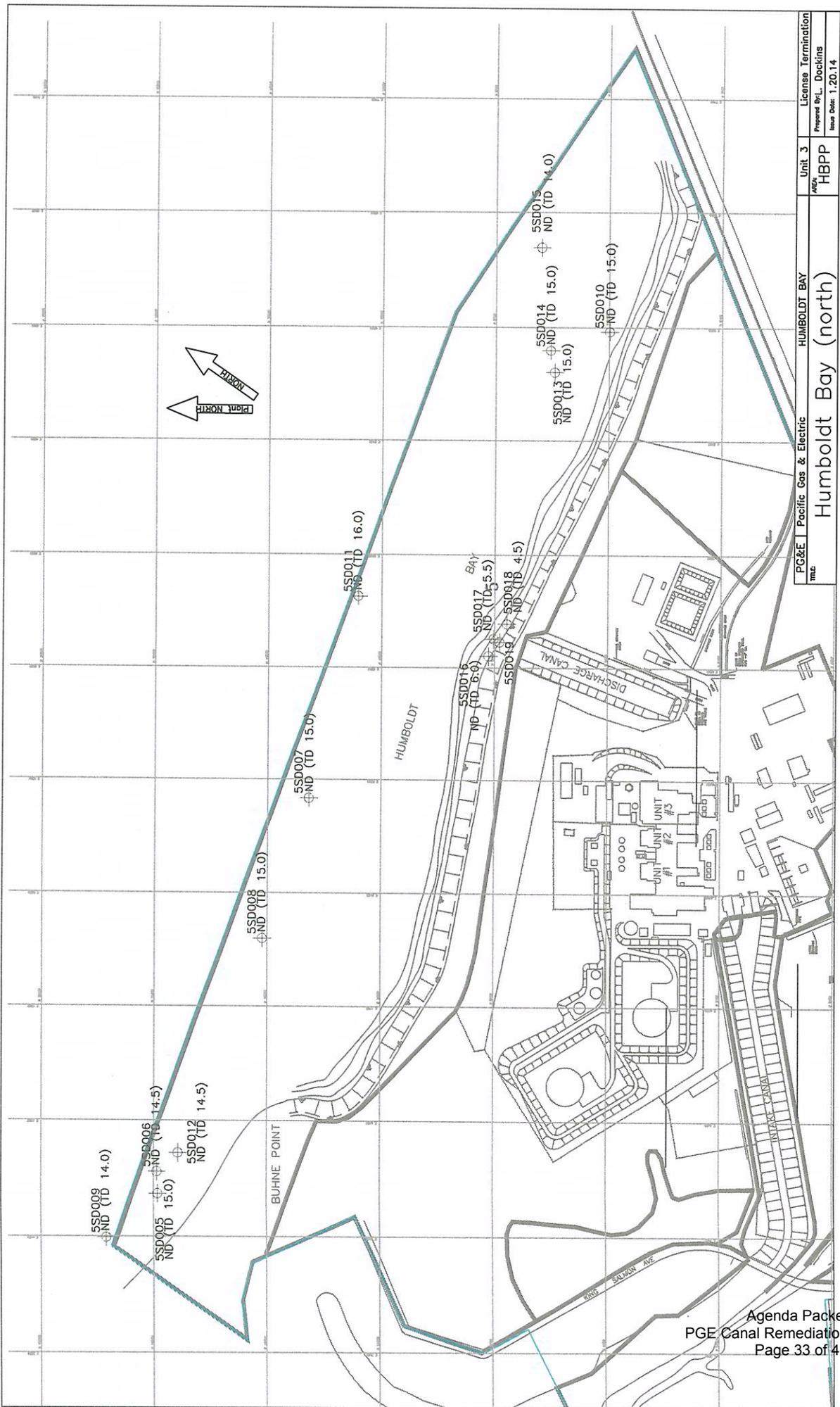
HUMBOLDT BAY
Discharge Canal



PG&E	Pacific Gas & Electric	HUMBOLDT BAY	Unit 3	License Termination
TITLE	Intake Canal		AREA	HBPP
				Prepared By: Dockins
				Issue Date: 1.20.14



PG&E	Pacific Gas & Electric	Unit 3	License Termination
msc	HUMBOLDT BAY	MS&C	Proposed Dr. Dockins
	Fisherman Channel	HBPP	Issue Date: 1.20.14



PC&E Pacific Gas & Electric	Unit 3	License Termination
me	HBPP	Prepared by: Dockins
		Issue Date: 1.20.14

Humboldt Bay (north)

HBPP Canals and Humboldt Bay Radiological Remediation and Clearance

Past radiological characterization of the Humboldt Bay Power Plant (HBPP) discharge canal, intake canal, fisherman's channel, and the Humboldt Bay were done to determine the need to remediate to the radiological clearance criteria set by the Nuclear Regulatory Commission (NRC). Where remediation is not indicated or after remediation is completed, the statistical variability of the sample data is used to construct survey methods and sample size to be able to statically determine that an area meets the clearance criteria. A work package containing detailed instructions for use of random sampling is developed for the survey crews performing the final status survey (FSS). Any indications of radiological activity above a screening threshold are required to be investigated and further remediation performed if required. All survey and sample results are compiled into a report that is submitted to the NRC. Additionally, the NRC will at times have an independent contractor (Oak Ridge Associated University) do confirmatory surveys and sampling to verify adequacy of the processes employed by Pacific Gas and Electric.

The entire process for characterization, development of data quality objectives, survey methods, and data quality assessment is defined in NRC NUREG 1575 Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM). Any deviations from the MARSSIM protocols must be approved by the NRC prior to implementation. Further information may be found in Chapters 2 and 5 of the Draft Humboldt Bay Power Plant License Termination Plan (LTP), currently under review by the NRC for approval. Chapter 2 contains the historical site assessment and radiological characterization data while chapter 5 describes the HBPP FSS program. The NUREG and LTP documents are public information and are available on the NRC web site.

CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885



W10a

Date Filed:	January 24, 2014
180 th Day:	July 23, 2014
Staff:	T. Luster-SF
Staff Report:	January 30, 2014
Hearing Date:	February 12, 2014

STAFF REPORT: REGULAR CALENDAR

Application No.:	9-13-0621
Applicant:	Pacific Gas and Electric Company
Location:	Humboldt Bay Power Plant 1000 King Salmon Avenue Eureka, CA (APN #305-131-035)
Project Description:	Remediation of intake and discharge canals formerly used by the Humboldt Bay Power Plant, near the City of Eureka, County of Humboldt.
Staff Recommendation:	Approval with Conditions

SUMMARY OF STAFF RECOMMENDATION

Pacific Gas & Electric Company (PG&E) proposes to remove approximately 10,000 cubic yards of contaminated sediments and other material from canals that were used to convey cooling water to and from the former Humboldt Bay Power Plant (HBPP), located adjacent to Humboldt Bay. These currently proposed activities are a necessary part of the ongoing power plant decommissioning and site cleanup PG&E is conducting pursuant to federal Nuclear Regulatory Commission (NRC) and state Department of Toxic Substances Control (DTSC) requirements. Completing the site decommissioning and cleanup will allow PG&E to terminate its NRC license and will allow for site restoration and reuse.

The proposed project's main activities include placing temporary water control structures in the canals, dewatering the work area within each canal, and mechanically removing all sediments that exceed cleanup standards. After completing remediation in the discharge canal, PG&E proposes to use it to temporarily store clean soils generated during other parts of its overall site cleanup. After completing remediation in the intake canal, PG&E proposes to grade and plant the canal and an adjacent area to create a mitigation area of marine and wetland habitat. PG&E expects to complete overall site decommissioning and cleanup by about 2019 and is required, pursuant to previous Commission-approved coastal development permits, to submit a permit application for site restoration.

Key Issues – Wetlands and Conflict Resolution: The proposed project includes dredging and filling to clean up radioactive materials and other contaminants in and adjacent to wetlands and areas of sensitive eelgrass habitat. Coastal Act Section 30233(a), which specifies allowable uses for which wetlands may be dredged or filled, does not include remediation as one of those uses. However, denying the proposed project based on this policy conflict would result in conflicts with other policies requiring protection of coastal water quality, wetlands, and sensitive habitats. As described in Section IV.H of these Findings, this conflict is best resolved by approving the proposed project despite its nonconformity with Section 30233(a), thereby allowing for removal of contaminants that would otherwise continue to threaten water quality and habitat values.

Special Conditions: Staff has recommended several conditions to ensure the proposed activities are consistent with applicable Coastal Act policies. [Special Condition 2](#) requires PG&E to submit documentation of several other required permits that address the project's stormwater management, waste management, and other issues. Because the project would result in temporary closure of a shoreline public access trail during part of the project activities, PG&E has proposed mitigation at a nearby accessway, and [Special Condition 3](#) requires PG&E to submit a public access enhancement plan that details the proposed access enhancements. The project also involves temporary and permanent losses of eelgrass and wetland habitat, and [Special Condition 4](#) requires PG&E to provide compensatory mitigation for those losses. Mitigation would occur at two sites – one in and adjacent to the intake canal and another at PG&E's adjacent Buhne Point Wetland Preserve, which contains about six acres of wetland and other habitat PG&E created or restored pursuant to requirements of other CDPs for its projects at HBPP. To ensure that the potential for oil and fuel spills is avoided and minimized and that necessary response measures are in place should spills occur, [Special Condition 5](#) requires PG&E to adhere to its facility Spill Prevention and Response Plan and to provide documentation that any vessels used for inwater work are covered by valid and current Spill Prevention and Response Plans. In recognition of the potential that excavation may expose cultural or archaeological artifacts, [Special Condition 6](#) requires PG&E to implement project activities consistent with applicable measures of a previously-approved Archaeological Resources Plan for the project site. Finally, to reduce potential visual effects along the shoreline, [Special Condition 7](#) requires project-related lighting to be directed downward and away from offsite areas to the extent allowed pursuant to human health and safety requirements.

Recommendation: Commission staff believes the project, as conditioned, would conform to applicable Coastal Act policies, and therefore recommends **approval** of coastal development permit application 9-13-0621.

TABLE OF CONTENTS

I. MOTION & RESOLUTION	4
II. STANDARD CONDITIONS	4
III. SPECIAL CONDITIONS.....	5
IV. FINDINGS & DECLARATIONS.....	8
A. PROJECT DESCRIPTION AND PURPOSE	8
B. COMMISSION JURISDICTION	12
C. OTHER AGENCY APPROVALS & CONSULTATIONS	12
D. PUBLIC ACCESS AND RECREATION.....	13
E. PROTECTION OF COASTAL WATERS, WETLANDS, AND SENSITIVE HABITAT.....	15
F. ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES.....	20
G. VISUAL RESOURCES	21
H. RESOLVING POLICY CONFLICTS	22
V. CALIFORNIA ENVIRONMENTAL QUALITY ACT.....	27

APPENDICES

Appendix A – Substantive File Documents

EXHIBITS

Exhibit 1 – Location Map

Exhibit 2 – Site Plan

Exhibit 3 – Temporary In-Bay Structures for Discharge Canal Work

Exhibit 4 – Mitigation Site – Buhne Point Wetlands Preserve

Exhibit 5 – Mitigation Site – Alpha Road Parking Area

I. MOTION & RESOLUTION

Motion:

*I move that the Commission **approve** Coastal Development Permit No. 9-13-0621 pursuant to the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. 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 a majority of the Commissioners present.

Resolution:

The Commission hereby approves the coastal development permit 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 feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment.

II. STANDARD CONDITIONS

This permit is subject to the following standard conditions:

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the Permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the Permittee to bind all future owners and possessors of the subject property to the terms and conditions.

III. SPECIAL CONDITIONS

1. **Assumption of Risk.** By acceptance of this permit, PG&E acknowledges and agrees (i) that the site may be subject to hazards from geologic hazards and erosion; (ii) to assume the risks to the Permittee and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement arising from any injury or damage due to such hazards.

2. **Other Approvals.** PRIOR TO STARTING CONSTRUCTION ACTIVITIES, PG&E shall provide to the Executive Director a copy of each of the following permits and approvals, or evidence that the permit or approval is not needed:
 - a. Humboldt Bay Harbor, Recreation, and Conservation District: approved development permit.
 - b. North Coast Regional Water Quality Control Board: approved Construction General Stormwater Permit and Section 401 Water Quality Certification.
 - c. Department of Toxic Substances Control: approved Interim Measures / Remedial Action Work (IM/RAW) Plan, or confirmation that project activities are consistent with requirements of the previously approved IM/RAW Plan.

PG&E shall inform the Executive Director of any changes to the project required by these permits or approvals. Such changes shall not be incorporated into the project until PG&E obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

3. **Public Access and Recreation.** PRIOR TO STARTING CONSTRUCTION ACTIVITIES, PG&E shall provide for Executive Director review and approval a proposed *Buhne Point Vista Improvement Plan* that describes PG&E's proposed measures to enhance public access at the Buhne Point vista and trail. The Plan shall include detailed descriptions of the following:
 - Existing conditions of the vista and trail area, including site and trail elevations, habitat and vegetation characteristics, and dimensions of the existing retaining wall, bench, trail, and other public access amenities.
 - Proposed changes and improvements to those existing amenities, including:
 - Plans and elevations of the proposed replacement retaining wall and bench.
 - Plans and elevations of the proposed new safety barrier. The safety barrier shall be designed to minimize loss of existing views from the overlook area.
 - Plans and elevations of any proposed changes to the existing trail, including any changes that may be needed for access to construct the above proposed improvements.

- A description of any changes to, or loss of, habitat or vegetation resulting from the above proposed improvements.
- Construction schedule for the proposed improvements.
- Maintenance measures that will be implemented to maintain the amenities.
- Legal mechanism(s) to ensure perpetual protection of the public accessway.
- Written approval from the Humboldt Bay Harbor, Recreation, and Conservation District to implement elements of the proposed Plan.

PG&E shall undertake development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

4. **Coastal Waters Compensatory Mitigation.** PRIOR TO PERMIT ISSUANCE, PG&E shall submit, for Executive Director review and approval, a Coastal Waters Compensatory Mitigation Plan that is consistent with the mitigation goals, objectives, performance standards, and monitoring requirements described in PG&E's August 2013 *Project Description and Coastal Resource Assessment – Humboldt Bay Power Plant Intake and Discharge Canal Remediation Project* and the November 11, 2013 *Biological Mitigation and Monitoring Plan for the Humboldt Bay Power Plant Canal Remediation Project*, and that is modified to clarify and include the following:

- The Plan shall provide for a total of at least 1.4 acres of created and enhanced intertidal and wetland habitat at the Buhne Point Wetlands Preserve and the Alpha Road Parking Area, and shall include detailed descriptions of proposed site topography, construction drawings, performance standards, monitoring and maintenance requirements, contingency plans, and schedules to implement the mitigation. Mitigation elements for the proposed "Mit-6" area of Buhne Point Wetlands Preserve shall be consistent with those in the *Buhne Point Wetlands Preserve Mitigation and Monitoring Plan for Humboldt Bay Repowering Project*, previously approved by the Commission pursuant to Coastal Development Permits E-07-005 and E-08-003.
- The Plan shall identify the legal mechanisms proposed to ensure permanent protection of the mitigation sites – e.g., conservation easements, deed restrictions, or other methods.

PG&E shall undertake development in accordance with the approved Plan. Any proposed changes to the approved Plan shall be reported to the Executive Director. No changes to the approved Plan shall occur without a Commission approved amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

5. **Spill Prevention and Response.** PRIOR TO USING VESSELS FOR INWATER WORK, PG&E shall provide documentation showing that all vessels to be used for project activities have a current and valid Spill Prevention and Response Plan for the proposed activities.

6. **Archaeological Resources.** PRIOR TO STARTING CONSTRUCTION ACTIVITIES, PG&E shall submit written confirmation that it will apply all applicable elements of the Archaeological Resources Protection Plan previously approved pursuant to CDP #E-09-010 to the currently proposed activities. Elements of the Plan that apply to this project shall include:
 - The worker training program to be implemented to assist workers in identifying potential cultural resources;
 - Monitoring to be conducted to identify potential resources that may be detected during clearing, trenching, and excavation activities;
 - Identifying the cultural resources specialist to be retained on call to investigate any potential cultural resources found during project activities; and,
 - Procedures to be implemented for halting construction and evaluating resources should they be discovered.

7. **Visual Resources.** All lighting structures and fixtures installed for use during the project and visible from public areas, including shoreline areas of San Diego Bay, shall be painted or otherwise finished in neutral tones that minimize their visibility from those public areas. Lighting used for project activities shall be directed downward and away from offsite areas to the extent allowed pursuant to applicable human health and safety requirements.

IV. FINDINGS & DECLARATIONS

A. PROJECT DESCRIPTION AND PURPOSE

Pacific Gas and Electric Company (PG&E) is proposing to remediate the intake and discharge canals used by the former Humboldt Bay Power Plant (HBPP) for transporting cooling water to and from Humboldt Bay. The power plant site is located along the shoreline of Humboldt Bay near the community of King Salmon, about two miles south of Eureka (see Exhibit 1 – Location Map). The HBPP included one nuclear generating unit and two gas-powered generating units. PG&E retired the HBPP in 2010 after completing construction of a replacement facility, the Humboldt Bay Generating Station, on an adjacent site.

These proposed canal remediation activities are part of PG&E's ongoing efforts to remediate contaminants remaining on site after several decades of power plant operations. PG&E's cleanup efforts are occurring pursuant to two main processes – a decommissioning and license termination process for the federal Nuclear Regulatory Commission (NRC) and a Voluntary Cleanup Process being conducted with oversight by the California Department of Toxic Substances Control (DTSC). Some of PG&E's cleanup activities are also subject to approvals by the Regional Water Quality Control Board (RWQCB) for proposed changes to discharges from the site. These include a construction stormwater permit and modified National Pollutant Discharge Elimination System (NPDES) permit to address discharges during demolition and decommissioning.

The Commission has previously approved several CDPs for other aspects of PG&E's HBPP decommissioning, including site preparation projects, removal and remediation of various structures and parts of the facility, and construction and operation of a spent nuclear fuel storage facility.¹ These currently proposed activities are a necessary step in the overall facility decommissioning and license termination, and this project is a necessary precursor to potential site redevelopment and restoration; however, these Findings do not evaluate or permit future potential site redevelopment or restoration activities.²

¹ Previously approved CDPs include:

- CDP E-05-001 (September 2005) for PG&E's Independent Spent Fuel Storage Installation (ISFSI). The ISFSI is meant to store spent, but still highly radioactive, fuel from the facility until the federal government establishes a permanent storage facility. PG&E completed the fuel transfer in December 2008.
- CDP E-07-005 (October 2007) for demolition of effluent ponds and placement of office buildings to be used during the decommissioning project.
- CDP E-07-013 (October 2008) for removal of a fuel oil pipeline as part of the retirement of Units 1 and 2.
- CDP E-08-003 (May 2008) for removal of a large fuel storage tank.
- CDP E-09-005 (June 2009) for site modifications, such as expanding and constructing access roads, grading areas for laydown and storage, etc. needed to prepare for decommissioning activities.
- CDP E-09-010 (December 2009) for decommissioning and remediation of the power units and other parts of the facility and site.

² Commission approval of other CDPs for work at this site – e.g., CDP #E-08-008, CDP #E-09-005 – included Special Conditions requiring PG&E to submit, at or near the end of its decommissioning activities, additional permit applications to address final site restoration.

Regulatory Note: The NRC has exclusive jurisdiction over radiological aspects of the proposal. The state is preempted from imposing upon operators of nuclear facilities any regulatory requirements concerning radiation hazards and nuclear safety. The state may, however, impose requirements related to other issues. The U.S. Supreme Court, in *Pacific Gas and Electric Company v. State Energy Commission*, 461 U.S. 190 (1983), held that the federal government has preempted the entire field of “radiological safety aspects involved in the construction and operation of a nuclear plant, but that the states retain their traditional responsibility in the field of regulating electrical utilities for determining questions of need, reliability, costs, and other related state concerns.” The facility’s current and proposed possession, handling, storage, and transportation of spent nuclear fuel are therefore precluded from state regulation. The Coastal Commission findings herein address only those state concerns related to conformity to applicable policies of the Coastal Act, and do not evaluate or condition the proposed project with respect to nuclear safety or radiological issues.

Background

PG&E operated the HBPP at this site from the 1950s until 2010, when PG&E completed construction of the adjacent Humboldt Bay Generating Station. The HBPP included two gas-fired generating units, constructed in the early 1950s, and a nuclear generating unit that started operation in 1963. In 1976, PG&E shut down the nuclear unit in order to determine what seismic safety upgrades would be needed to comply with an NRC order issued earlier that year. In 1983, PG&E determined it would not be cost-effective to modify the facility as needed to restart the unit, so it started the process to decommission the facility and put it into “safe storage” (or SAFSTOR), pursuant to NRC regulations. In 1985, the NRC amended PG&E’s license to “possess but not operate” status. In 1998, the NRC approved PG&E’s SAFSTOR plan and PG&E submitted its initial decommissioning plan.

Site Description

The power plant site is a 143-acre parcel located on the shore of Humboldt Bay just east of the community of King Salmon (see Exhibit 2 – Site Plan). Roughly half of the site consists of various habitat types, including the open waters of Humboldt Bay, tidal mudflats and marshes, freshwater marshes, riparian channels, and associated uplands. Most of the developed areas of the site are located on fill placed during construction of the HBPP starting in the 1950s. The site includes about one-half mile of Humboldt Bay shoreline, most of which has been riprapped to protect the power plant.

Proposed Project Activities

To terminate its NRC license, PG&E must remove all nuclear material from the facility, including structures and materials that show radioactivity. Sampling and testing shows that some of the intake and discharge canal sediments contain levels of radioactivity that exceed NRC site limits and therefore must be removed to allow license termination. Some of the sediments also contain levels of polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and metals at levels above the ecological screening criteria established by the California Department of Toxic Substances Control (DTSC). PG&E expects to remove about 9,000 cubic yards of sediment during remediation, as well as structures, piping, and other appurtenances associated with the two canals.

The primary project activities involve remediating the HBPP intake and discharge canals. PG&E will conduct many of the same activities in both canals – placing water quality protection measures, removing sediments from the canal areas to meet NRC and DTSC cleanup standards, and demolishing and removing associated structures, etc. – which are described in more detail below. In addition, after the discharge canal area meets the necessary cleanup limits, PG&E plans to use that area to temporarily store clean soils it plans to use later for site remediation.

The main activities and project steps include:

- **Preconstruction Surveys and Plans:** PG&E will conduct topographic, geotechnical, and utility surveys in and near both canals to determine existing site grades and conditions, characterize soils and sediment, and to identify whether utilities or other buried structures are located within or near the work areas. PG&E will also prepare a soil/sediment excavation plan and an erosion, sediment, and dust control plan, and will amend its existing Stormwater Pollution Prevention Plan (SWPPP) to meet Regional Water Quality Control Board requirements.
- **Site Preparation:** These activities include preparing areas for equipment laydown, soil and material handling, and staging, along with installing equipment and structures needed to meet SWPPP requirements. PG&E will also install temporary security fencing along areas of the site perimeter that will be subject to construction.
- **Canal Dewatering:** At both canals, PG&E will first isolate the existing power plant piping from the canals and redirect surface drainage away from the canal areas. PG&E will also install temporary structures in each canal to isolate the work areas from nearby tidal waters. For the intake canal, PG&E will install a coffer dam or similar structure about 300 feet from the power plant intake. For the discharge canal, PG&E will plug the four outfall pipes that extend beneath the riprap. PG&E will then dewater both canals and route the water, as necessary, to the site's existing Groundwater Treatment System. PG&E is consulting with the National Marine Fisheries Service (NMFS) and the California Department of Fish and Wildlife (CDFW) to determine how it will remove and relocate any fish that may be found within the waters isolated within these areas.
- **Excavation:** After conducting additional sampling and testing to determine the full extent of contamination, PG&E will mechanically remove sediments from within the isolated canal areas. It currently expects excavation to extend no more than about three feet below the existing sediment surface over an area covering about 25,000 square feet of the intake canal and about 45,000 square feet of the discharge canal. PG&E will also remove riprap as needed to allow the necessary sediment excavation, and will re-use riprap that meets testing requirements.
- **Structural Demolition and Removal:** PG&E will remove the power plant's intake and discharge structures from the canal areas, along with associated piping, pumps, and appurtenances. The intake structure is 67 feet by 52 feet by 26 feet and contains about 4,000 cubic yards of concrete. The discharge structure is somewhat smaller, at 27 feet by 13 feet by 18 feet, and is also made of concrete.

PG&E will also remove the four outfall pipes that extend from the discharge canal beneath the shoreline trail and riprap into Humboldt Bay. These pipes are about 60 feet long and 48 inches in diameter. Before removing the pipes, PG&E will install a turbidity curtain in Humboldt Bay to isolate the pipes from open Bay waters and then install a temporary sheetpile wall inside the turbidity curtain for added protection against excess turbidity or sedimentation from the pipe removal entering open Bay waters (see Exhibit 3 – Temporary In-Bay Structures for Discharge Canal Work). As part of pipe removal, PG&E will need to temporarily remove a 100-foot section of shoreline riprap above the pipes.

- **Interim Restoration and Soil Storage:** After contaminants are removed and the canal areas meet cleanup requirements, PG&E will recontour the intake canal area to provide subtidal and intertidal habitat, as described in Section IV.E below. The discharge canal will be configured to serve as a temporary clean soil stockpile area for use during PG&E's Spent Fuel Pool and Reactor Caisson Removal Project (as approved pursuant to CDP #E-09-010-A3). PG&E anticipates storing up to about 30,000 cubic yards of clean soil from that project in this area until it completes site remediation.

The project will also be subject to the waste management activities being conducted as part of other elements of PG&E's power plant demolition and decommissioning projects, including soil sampling, testing, and handling, and treatment of stormwater and groundwater. PG&E expects that project activities will generate about 9,000 cubic yards of soil, 1,500 cubic yards of concrete waste, and the four outfall pipes. Pursuant to DTSC requirements, PG&E will sample and test these materials to determine whether they require offsite transport and disposal or can be re-used onsite. Where feasible, PG&E will re-use soil, concrete, riprap, and other materials that tests show are clean enough for onsite uses.

Project timing, staging, and work effort

PG&E plans to start site preparation in early 2014 and expects project activities to occur over about a 14-month period. Much of the remediation work at the two canals will be done concurrently, with removal of sediments and structures at both canals starting in mid-2014 and expected to end by early 2015. PG&E expects to use the discharge canal area for temporary soil storage until the end of decommissioning, which is currently planned for no later than 2019.

Most work would be done using standard construction equipment, including cranes, excavators, backhoes, and bulldozers. PG&E would use vessels to install, maintain, and remove the cofferdam to be placed within Humboldt Bay. PG&E expects to have a workforce of 25 to 35 people for the project, which would be in addition to the existing workforce conducting other elements of PG&E's decommissioning effort. PG&E does not expect to conduct nighttime operations; if needed, however, PG&E has stated it would confer with Commission staff to determine whether permit changes would be needed to address noise, light, or other possible adverse impacts.

If all excavated material (i.e., just over 10,000 cubic yards) needs to be transported offsite, PG&E estimates about 1000 truck trips would be needed over the several months of excavation. Similar to previous projects at the site, PG&E plans to spread out each day's truck trips over the

course of the day to reduce potential traffic delays. PG&E estimates that project-related greenhouse gas emissions, which would be generated primarily from heavy equipment use, truck traffic, and worker vehicles, will total about 1,040 metric tonnes of CO₂ equivalents (CO₂e). This is below the current state air board interim threshold for industrial projects of 10,000 tons CO₂e per year.

B. COMMISSION JURISDICTION

The project site is entirely within the coastal zone and within the Commission's retained jurisdiction. The standard of review is Chapter 3 of the Coastal Act.

C. OTHER AGENCY APPROVALS & CONSULTATIONS

The project is additionally subject to permits and approvals from the following:

- **Humboldt Bay Harbor, Recreation and Conservation District:** The project is subject to a development permit from the District, which also served as the CEQA lead agency for the project.
- **Department of Toxic Substances Control (DTSC):** PG&E is conducting the project pursuant to DTSC direction and oversight as described in its DTSC-approved Interim Measure/Removal Action Workplan (IM/RAW), which establishes soil cleanup standards for PG&E's demolition and decommissioning activities.
- **North Coast Regional Water Quality Control Board:** Project activities will be subject to the Regional Board's Construction General Permit No. 12C357418, National Pollutant Discharge Elimination System (NPDES) Permit No. 0005622, and Section 401 Water Quality Certification.

[Special Condition 2](#) requires that PG&E submit, prior to starting onsite project activities, proof that it has obtained the above permits or documentation from the agencies that a permit is not needed.

The project will also be subject to a Section 404 permit from the U.S. Army Corps of Engineers, due to placement of fill in coastal waters and wetlands, and this permit serves as the Commission's consistency certification for the Corps permit. Additionally, and as noted above, the project is part of PG&E's continuing effort to complete the decommissioning and remediation activities needed to terminate PG&E's license with the Nuclear Regulatory Commission. PG&E expects to complete all necessary activities by 2018, with license termination expected by 2019.

D. PUBLIC ACCESS AND RECREATION

Coastal Act Section 30211 states:

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

Coastal Act Section 30212(a) states:

Public access from the nearest public roadway to the shoreline and along the coast shall be provided in new development projects except where: (1) It is inconsistent with public safety, military security needs, or the protection of fragile coastal resources, (2) Adequate access exists nearby, or, (3) Agriculture would be adversely affected. Dedicated accessway shall not be required to be opened to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the accessway.

Coastal Act Section 30214 states, in relevant part:

- (a) *The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:*
- (1) Topographic and geologic site characteristics.*
 - (2) The capacity of the site to sustain use and at what level of intensity.*
 - (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.*
 - (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.*

Coastal Act Section 30221 states:

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

Coastal Act policies require generally that development located adjacent to the shoreline in an area with ongoing public use not interfere with that use and provide access to the shoreline. Although much of this project site consists of an industrial facility with restricted access, it includes a trail that runs along most of the site's one-half mile long shoreline boundary (shown on Exhibit 2). This public accessway has long been used for low-intensity recreation, such as fishing, bird and wildlife watching, and scenic enjoyment of the Bay, and is described as an

important link in a proposed system of trails around Humboldt Bay.³ Prior to 2005, the accessway consisted of an informal path adjacent to the riprap lining the shoreline. As part of its CDP approval for PG&E's spent fuel storage facility at the site, the Commission required PG&E to improve the accessway and protect it through a "rolling" deed restriction to allow continued access in the event of coastal erosion or sea level rise.⁴

Also adjacent to the project site is another public accessway – the Buhne Point Vista Trail, which is a short, unimproved trail on Harbor District property just to the south of the PG&E site. It leads from King Salmon Boulevard to a bench and scenic overlook about forty feet above the Bay. The overlook area is also designated as a tsunami evacuation point for nearby residents and workers.

PG&E proposes to close part of the shoreline trail for approximately three months while it remediates the discharge canal sediments and removes the outfall pipes that extend beneath the trail and into the Bay. To ensure safe conditions for the public during that work period, PG&E plans to close the portion of the trail nearest the discharge canal, which will result in a temporary loss of access to the easternmost two-thirds of the trail. The westernmost portion of the trail extending from King Salmon Boulevard to within about two hundred feet of the canal would remain open.

Mitigation

To address this short-term loss of access, PG&E has proposed mitigation in the form of public access improvements to the aforementioned Buhne Point Vista Trail. The existing trail is a narrow path with some areas of wooden stairs. The seating area at the top of the trail includes a wooden retaining wall and built-in bench, both of which are in disrepair. The overlook area is perched above a steep slope where informal "short-cut" trails have created erosion-prone gullies. The trail and overlook are located on land that PG&E deeded to the Humboldt Harbor District in 1984.

PG&E proposes to replace the existing retaining wall and bench with a similarly-sized concrete wall and bench. PG&E would also install a safety barrier at the edge of the steep slope, both to improve safety and to reduce creation of informal trails on the slope. PG&E has not yet developed a construction-level design of these improvements; however, it proposes to submit, prior to starting its canal remediation work, a *Buhne Point Vista Improvement Plan* that provides the proposed design and a schedule to complete the improvements. To implement this proposal and to ensure adequate public access is provided and maintained, [Special Condition 3](#) requires PG&E to submit a plan that provides a detailed description of the existing conditions of the trail and overlook area, including existing vegetation in the area, site and trail elevations, dimensions of the existing retaining wall and bench, and other characteristics. The Plan is also to include a detailed description of the proposed improvements, including a site plan and elevations of the area with the proposed improvements, as well as construction-level drawings of the

³ See Redwood Community Action Agency, *Humboldt Bay Trails Feasibility Study*, prepared with funding from the California Coastal Conservancy, 2001.

⁴ See Commission's *Final Adopted Findings for CDP #E-05-001*, September 2005.

improvements to be installed. The Plan is to also illustrate that the proposed safety barrier is designed to minimize the loss of views from the overlook area. PG&E states that it has received verbal approval from the Harbor District for the proposed work; however, [Special Condition 3](#) also requires PG&E to submit written approval of the proposed improvements from the Harbor District and to provide for perpetual legal protection of the accessway.

Conclusion

Based on the above, the Commission finds that the project, as conditioned, conforms to the relevant public access and recreation policies of the Coastal Act.

E. PROTECTION OF COASTAL WATERS, WETLANDS, AND SENSITIVE HABITAT

Coastal Act Section 30230 states:

Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Coastal Act Section 30231 states:

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

Coastal Act Section 30232 states:

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

Coastal Act Section 30233 states, in relevant 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 less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

- (1) New or expanded port, energy, and coastal-dependent industrial facilities, including commercial fishing facilities.*
- (2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.*
- (3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.*
- (4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.*
- (5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.*
- (6) Restoration purposes.*
- (7) Nature study, aquaculture, or similar resource-dependent activities.*

Coastal Act Section 30240 states:

- (a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.*
- (b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

These Coastal Act policies require generally that development protect coastal waters, wetlands, and sensitive habitat and not result in adverse effects to those waters and their associated coastal resources. The policies also limit allowable uses within coastal wetlands and require protection against spills of hazardous substances into coastal waters. As described below, the proposed project includes dredging and filling of wetlands for a use not allowed under Coastal Act Section 30233(a) and which the Commission must therefore resolve using the conflict resolution process provided by Coastal Act Sections 30007.5 and 30200(b).

Adverse Effects to Coastal Water Quality

The HBPP site includes and is adjacent to several areas of coastal waters and wetlands that will be affected by project activities. Although the canal areas were constructed as part of the power plant, they are connected to the tidal waters of Humboldt Bay and provide known or potential habitat for several listed species, including eelgrass, the tidewater goby (*Eucyclogobius newberryi*), North American green sturgeon (*Acipenser medirostris*), longfin smelt (*Spirinchus thaleichthys*), and several salmon species. Project activities could adversely affect these and other coastal waters through turbidity, sedimentation, and transport of contaminants. Removal of outfall pipes from the discharge canal will include work within Humboldt Bay and will result in a temporary restriction in Bay waters.

PG&E has included several mitigation measures with the project that are expected to avoid, reduce, or compensate for several of the project's adverse effects on coastal waters. To reduce the potential for turbidity or sedimentation in coastal waters adjacent to the work areas in each canal, PG&E will isolate those work areas before starting remediation. At the intake canal, PG&E will install a temporary coffer dam, inflatable bladder dam, or other similar device suitable for isolating the work area from tidal waters. At the discharge canal, PG&E will plug the four outfall pipes between the canal and the Bay with inflatable plugs, grout, or other similar materials. PG&E will also install a temporary coffer dam within Humboldt Bay around the outfall pipe area before removing those pipes. Before installing these water control structures, PG&E will conduct fish rescue and relocation pursuant to a plan approved by the National Marine Fisheries Service as part of project review under Section 7 of the federal Endangered Species Act. Fish removal methods are expected to include seining the canal areas during low tide and removing remaining fish by hand as necessary. PG&E will conduct similar relocation activities for Northern red-legged frogs and any egg masses that may be in the area, which would be removed to a pond in PG&E's nearby Buhne Point Wetlands Preserve (see description below). PG&E will sample and test water within the work areas before dewatering and will route any water that exceeds the cleanup standards through the existing onsite Groundwater Treatment System, which was installed several years ago to treat contaminated water as required by DTSC. PG&E will also be subject to a construction stormwater permit from the North Coast Regional Water Quality Control Board.

Adverse Effects on Eelgrass, Wetlands, and Sensitive Habitat

The project activities will unavoidably affect eelgrass and wetlands in order to adequately remove contaminated materials. The intake canal work area includes about 721 square feet of eelgrass and the discharge canal work area contains about 815 square feet of eelgrass, for a total of 0.035 acres. The Commission has identified eelgrass as a "species of special biological significance," as it supports several other special species in California's coastal waters. Remediation in the intake canal will adversely affect a narrow band of salt marsh and coastal bluff scrub lining parts of the canal. This marsh habitat is dominated by Pacific pickleweed (*Salicornia pacifica*), along with seaside arrowgrass (*Triglochin maritima*), salt grass, dense-flowered cordgrass (*Spartina densiflora*), and triangle orache (*Atriplex prostrata*). Remediation activities along the discharge canal will result in a loss of about 0.24 acres of emergent wetlands, including about 0.14 acres of Corps-jurisdictional wetlands and an additional 0.10 acres of Commission-jurisdictional wetlands. These wetlands are dominated by spikerush (*Eleocharis* sp.), salt rush (*Juncus lescurii*), tufted hairgrass (*Deschampsia caespitosa*), salt grass (*Distichlis spicata*), silverweed cinquefoil (*Potentilla anserine*), and field horsetail (*Equisetum arvense*), and provide suitable habitat for the Northern red-legged frog. Additionally, the temporary installation of a turbidity curtain and cofferdam in the Bay will cause temporary adverse effects to about 0.25 acres of Bay habitat.

The proposed wetland impacts are subject to provisions of Coastal Act Section 30233(a), which allows filling or dredging of wetlands only for certain uses, only where there are no feasible less damaging alternatives, and where feasible mitigation measures are included to minimize adverse effects. PG&E has minimized its expected impacts to these coastal resources by reducing its project footprint to just those areas where sampling and testing has shown sediment and soil contaminant levels make remediation necessary. As a result, project activities will adversely

affect only about one quarter-acre of relatively low-quality wetlands close to the canal area and will affect eelgrass habitat only within the footprints of the canal structures, not in other nearby coastal waters. Additionally, there are no alternatives that would allow the contaminants to be removed, as the soils and sediments are part of the underlying matrix beneath these sensitive habitat areas. However, as described below, remediation is not an allowable use under Section 30233(a), and approval of the project requires Commission consideration of the Coastal Act's conflict resolution provisions in Sections 30007.5 and 30200(b).

Allowable Use

Coastal Act Section 30233(a) allows filling or dredging of wetlands only for certain uses. As noted above, this project's primary purpose is to cleanup areas of contamination at the PG&E power plant site, some of which will require dredging and filling of wetlands. However, remediation is not one of the uses identified in Section 30233(a) that allows for dredging and filling. Nonetheless, the project would result in several environmental benefits that would occur with the Commission's approval and PG&E's implementation of the project – for example, the activities would remove a source of contamination that creates ongoing risk to nearby water quality, wetlands, and other coastal habitats, and would also allow PG&E to complete a larger and more comprehensive site restoration that is planned once power plant decommissioning activities are complete. The proposed project therefore creates a type of conflict among Coastal Act policies meant to be addressed by application of the Act's conflict resolution policies – that is, although approval of the project would create a policy inconsistency, denial of the project would also result in a policy inconsistency, as well as greater adverse environmental consequences. This conflict resolution is described in Section IV.H below.

Compensatory Mitigation

For purposes of the Coastal Act, the temporary or permanent loss of the dewatered areas within the intake and discharge canal structures where project activities would take place does not require compensatory mitigation, since they were constructed as part of the power plant and until very recently served as a component of the facility. However, as discussed below, the areas of wetlands and eelgrass within or along portions of both canals are coastal habitat resources subject to Coastal Act policies, and adverse effects to those coastal resources must be consistent with those policies.

To provide compensatory mitigation for the loss of wetlands and eelgrass habitat, PG&E has proposed establishing two nearby mitigation areas – one within the existing Buhne Point Wetlands Preserve, and one at the Alpha Road Parking Area adjacent to the intake canal (see Exhibits 4 and 5):

- The Buhne Point Wetlands Preserve is located along the south boundary of the PG&E site (see Exhibit 4). It consists of about six acres of wetlands that were created, restored, or enhanced in response to mitigation requirements of several Commission CDPs and the Energy Commission's approval of PG&E's nearby Humboldt Bay Generating Station. The Preserve includes a landscape mosaic of coastal grasslands, riparian scrub and forest, and freshwater marsh areas. PG&E proposes to add a new 0.27-acre area (labeled as "Mit-6" on Exhibit 4) to the Preserve to expand an adjacent existing area of seasonal ponding and perennial wetland vegetation. The Mit-6 site is currently a graveled overflow parking

area, and PG&E proposes to remove the gravel, grade the area, and plant with local, native vegetation species to provide an area of seasonal freshwater marsh, riparian habitat, and perennial grassland. Performance standards, monitoring requirements, and maintenance measures will be similar to those used previously for other mitigation components of the Preserve, as required through the above-referenced CDPs.

- The Alpha Road Parking Area is adjacent to the intake canal (see Exhibit 5). It was originally built to provide parking during construction of the Humboldt Bay Generating Station and has been used since completion of that project for worker parking during the past several years of HBPP decommissioning. The California Energy Commission's approval of that project required PG&E to restore the Parking Area when it was no longer needed for the construction or decommissioning projects. PG&E plans to establish a new parking area in the interior of the power plant site, which will result in the Alpha Road Parking Area no longer being needed.

This Parking Area consists of a graveled area about twelve feet above mean sea level, a walkway along the intake canal, and a narrow band of salt marsh and scrub vegetation adjacent to the intake canal. PG&E proposes to remove the gravel and grade the site to create a larger area of intertidal mudflats, salt marsh, coastal scrub and grasslands extending from the existing intake channel area. The project would result in about 0.84 acres of wetland creation and 0.29 acres of wetland enhancement, which will include about 0.37 acres of eelgrass habitat.

To compensate for a permanent loss of about 0.24 acres of wetlands and 0.035 acres of eelgrass, and a temporary reduction of about 0.25 acres of Bay habitat, the two mitigation sites would provide a total of about 1.4 acres of created and enhanced wetland habitat. This results in a mitigation ratio of about 5:1 when considering just the permanent losses and a ratio of about 2.6:1 when considering both permanent and temporary losses together. The proposed mitigation ratio for eelgrass habitat – i.e., creation of 0.37 acres for the loss of about 0.035 acres – is greater than 10:1. These replacement ratios are generally in line with other Commission-approved plans for compensatory mitigation. In addition, the created habitat expected at both the Buhne Point and Alpha Road mitigation areas is expected to be of higher quality and provide greater habitat values than the areas being lost due to canal remediation, as the mitigation sites will provide larger habitat areas that are contiguous to existing coastal waters and wetlands. In addition, PG&E is designing the Alpha Road site with slopes suitable to allow the various habitat types to shift in response to ongoing sea level rise.

To ensure these proposed mitigation areas are implemented in a manner that adequately compensates for the expected habitat losses, [Special Condition 4](#) requires PG&E to submit, for Executive Director review and approval a mitigation plan that details the proposed mitigation sites and describes performance standards, monitoring and maintenance requirements, contingency plans, and schedules to implement the mitigation.

Spill Prevention and Response

Most project activities will be subject to the facility's existing Spill Prevention and Response Plan, as well as a North Coast Regional Water Quality Control Board Construction Stormwater Permit, which includes a number of conditions that will further reduce the potential for spills and impacts from spills. Some of PG&E's inwater work – i.e., installing a temporary turbidity curtain and sheetpiles in Humboldt Bay and removing the discharge canal's outfall pipes – will be done using vessels and barge-mounted equipment. To ensure this inwater work is done in a manner to reduce the potential for spills, [Special Condition 5](#) requires PG&E to submit documentation showing that all vessels to be used during project activities have a valid and current Spill Prevention and Response Plan.

Conclusion

PG&E has included in its project several mitigation measures that will avoid and minimize many of the potential adverse effects of project activities on coastal waters, wetlands, and sensitive habitat areas. In addition, [Special Conditions 4](#) and [5](#) result in further reduction of those adverse effects. However, as described above, the Commission finds that the proposed project is inconsistent with the allowable use provisions of Coastal Act Section 30233(a). Nonetheless, to deny the proposed project or to modify it to remove these inconsistencies would result in effects on coastal resources that conflict with other Chapter 3 policies. The Commission must resolve these inconsistencies by applying Coastal Act Section 30007.5, as is described below in Section IV.H of these Findings.

F. ARCHAEOLOGICAL AND PALEONTOLOGICAL RESOURCES

Coastal Act Section 30244 states:

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

BACKGROUND AND ANALYSIS

The project site, located on the resource-rich shoreline of Humboldt Bay, has the potential to contain archaeological remains. Much of the site consists of fill placed in the 1950s to support power plant construction; however, some of the project activities include excavation in what may include the original, undisturbed substrate beneath the site and that may include previously unrecorded archeological resources. During a 2006 archaeological survey conducted as part of PG&E's Humboldt Bay Repowering Project (California Energy Commission Application for Certification 06-AFC-07), the site was determined to be potentially sensitive for prehistoric cultural resources based on its location and its proximity to other known Native American sites.

Previous Commission-approved CDPs for PG&E's projects at this site have recognized the potential presence of these resources and have required PG&E to implement an Archaeological Resources Protection Plan that includes instituting a construction worker training program to help identify cultural resources, conducting monitoring to identify potential resources that may

be identified during clearing, trenching, or excavation activities, and retaining a cultural resources specialist on call to investigate any potential cultural resources found during project activities.⁵ The approved Plan also includes procedures for halting construction should any resources be located and evaluating those resources should they be discovered. [Special Condition 6](#) requires that PG&E apply all applicable provisions of the previously approved Plan to the currently proposed activities.

Conclusion

Based on the discussion above, the Commission finds that the project, as conditioned, will conform to the archaeological resource protection policies of Coastal Act Section 30244.

G. VISUAL RESOURCES

Coastal Act Section 30251 states:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The Coastal Act generally requires that permitted development protect views to and along the coast. Although the proposed activities will cause some temporary visual impacts due to the presence of large construction equipment, use of lighting, etc., these impacts are expected to be relatively minor. Further, by removing structures that are no longer being used, the project is expected to improve the site's visual characteristics over existing conditions.

Some project activities would occur within and adjacent to part of the Humboldt Bay shoreline that is visible from other nearby publicly-accessible shoreline areas and from the coastal waters of the Bay itself. These areas are valued in part for their views of the Bay, for wildlife and bird watching, and for recreational activities.

The main activities that would affect visual resources include equipment staging and movement and lighting needed during the project. Many of these activities are similar to those already occurring at the power plant, but some would occur directly on the shoreline. To reduce potential project impacts on visual resources, [Special Condition 7](#) requires PG&E to direct all necessary lighting downward and inward to the extent allowed by NRC security requirements. In addition, part of PG&E's proposed public access mitigation involves placing a safety barrier

⁵ See *Archaeological Resources Protection Plan* approved pursuant to CDP #E-09-010.

at an existing public overlook; however, [Special Condition 3](#) requires that the barrier be designed and constructed to minimize any loss of scenic quality.

Conclusion

For the reasons described above, the Commission finds that the proposed project, as conditioned, will be carried out in a manner that is protective of environmentally sensitive habitat areas and is therefore consistent with Coastal Act Section 30251.

H. RESOLVING POLICY CONFLICTS

Coastal Act Section 30007.5 states:

The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

Coastal Act Section 30200(b) states:

Where the commission or any local government in implementing the provisions of this division identifies a conflict between the policies of this chapter, Section 30007.5 shall be utilized to resolve the conflict and the resolution of such conflicts shall be supported by appropriate findings setting forth the basis for the resolution of identified policy conflicts.

As noted previously in this report, the proposed project's dredging and filling of wetlands is inconsistent with the allowable uses identified in Coastal Act Section 30233(a). However, as explained below, denying the proposed project to eliminate this inconsistency would lead to nonconformity with other Coastal Act policies, namely Sections 30230, 30231 (marine biology and water quality), and 30240 (environmentally sensitive habitat areas).

Regarding the inconsistency, although the proposed activity does not conform to any of the allowable uses listed in Section 30233(a), the dredging and filling are necessary to remove contaminants and prevent ongoing adverse effects to coastal species and habitats in a manner protective of coastal waters, wetlands, and sensitive habitat areas. Denying the project on the basis of this inconsistency would result in the continued presence of contaminants and their associated hazards. Denial would also prevent the larger scale site restoration PG&E plans to do (and is required to do) at the completion of site decommissioning and remediation. In such a situation, when a proposed project is inconsistent with a Chapter 3 policy, and denial or modification of the project would be inconsistent with another policy, Section 30007.5 of the Coastal Act provides for resolution of such a policy conflict.

Applying Section 30007.5 to the Proposed Project

As indicated previously, the standard of review for the Commission's decision on a coastal development permit in the Commission's retained jurisdiction is whether the proposed project is consistent with the Coastal Act's Chapter 3 policies. A proposal must generally be consistent with all relevant policies in order to be approved. If inconsistent with one or more policies, the proposal must normally be denied or conditioned to make it consistent with all relevant policies.

However, the Legislature recognized through Sections 30007.5 and 30200(b) that conflicts can occur among those policies. It therefore declared that when the Commission identifies a conflict among the policies of Chapter 3, the conflict is to be resolved "in a manner which on balance is the most protective of significant coastal resources," pursuant to Coastal Act Section 30007.5.

Resolving conflicts through application of Section 30007.5 involves the following seven steps:

- 1) The project, as proposed, is inconsistent with at least one Chapter 3 policy;
- 2) The project, if denied or modified to eliminate the inconsistency, would affect coastal resources in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources;
- 3) The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement;
- 4) The project, if approved, would result in tangible resource enhancement over existing conditions;
- 5) The benefits of the project are not independently required by some other body of law;
- 6) The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to "create a conflict"; and,
- 7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

Each step is explained below in greater detail and applied to the proposed project.

1) The project, as proposed, is inconsistent with at least one Chapter 3 policy.

For the Commission to apply Section 30007.5, a proposed project must be inconsistent with an applicable Chapter 3 policy. In the case of this proposed project, the inconsistency is with Section 30233(a), which allows dredging and filling in wetlands for any of only several specifically-listed uses. The project's purpose, site remediation, is not one of those uses.

2) The project, if denied or modified to eliminate the inconsistency, would affect coastal resources in a manner inconsistent with at least one other Chapter 3 policy that affirmatively requires protection or enhancement of those resources.

A true conflict between Chapter 3 policies results from a proposed project which is inconsistent with one or more policies, and for which denial or modification of the project would be inconsistent with at least one other Chapter 3 policy. Further, the policy inconsistency that would be caused by denial or modification must be with a policy that affirmatively mandates protection or enhancement of certain coastal resources. Denial of the project would be inconsistent with three policies of this type –Section 30230, which requires, in part, that "Marine resources *shall* be protected for such uses"; Section 30231, which

requires, in part, that biological productivity “*shall* be maintained”; and Section 30240, which requires, in part, that environmentally sensitive habitat areas “*shall* be protected against any significant disruption of habitat values” [*emphasis added in each*]. In most cases, denying a proposed project will not cause adverse effects on coastal resources for which the Coastal Act mandates protection or enhancement, but will simply maintain the status quo. Where denial of a project would result in such effects, as with this project, a conflict between or among two or more Coastal Act policies is presented.

3) The project, if approved, would be fully consistent with the policy that affirmatively mandates resource protection or enhancement.

For denial of a project to be inconsistent with a Chapter 3 policy, the proposed project would have to protect or enhance the resource values for which the applicable Coastal Act policy includes an affirmative mandate. That is, if denial of a project would conflict with an affirmatively mandated Coastal Act policy, approval of the project would have to conform to that policy. If the Commission were to interpret this conflict resolution provision otherwise, then any proposal, no matter how inconsistent with Chapter 3, that offered a slight incremental improvement over existing conditions could result in a conflict that would allow the use of Section 30007.5. The Commission concludes that the conflict resolution provisions were not intended to apply to such minor incremental improvements.

Because the site decommissioning is designed to remove contaminants and thereby prevent their uncontrolled release to the environment and adverse effects on the biological resources mentioned above, the project, as proposed and conditioned, is therefore fully consistent with the provisions of Coastal Act Sections 30230, 30231, and 30240, including those regarding protection against habitat disruption, maintenance of biological productivity, and others.

4) The project, if approved, would result in tangible resource enhancement over existing conditions.

This aspect of the conflict between policies may be looked at from two perspectives – either that approval of the project would result in improved conditions for a coastal resource subject to an affirmative mandate, or that denial or modification of the project would result in continued degradation of that resource.

Project approval would result in hazardous material being removed from the site and shipped to a safe offsite location, thereby removing the ongoing risk these contaminants pose to nearby habitats and species. Conversely, denial of the project would result in the continued presence of these contaminants and the continued risk of release. But for the project, the contaminants could be expected to remain at the site for at least several more decades and be part of the biological uptake of nearby species, coastal waters, wetlands, and other coastal habitats, which would be inconsistent with Coastal Act policies established to protect marine life, water quality, and sensitive habitat areas. Therefore, denial of the project would conflict with the policies of Sections 30230, 30231, and 30240.

- 5) The benefits of the project are not independently required by some other body of law.**
The benefits that would cause denial of the project to be inconsistent with a Chapter 3 policy cannot be those that a project proponent is already being required to provide pursuant to another agency's directive under another body of law. In other words, if the benefits would be provided regardless of the Commission's action on the proposed project, the project proponent cannot seek approval of an otherwise unapprovable project on the basis that the project would produce those benefits – that is, the project proponent does not get credit for resource enhancements that it is already being compelled to provide. For this project, PG&E is proposing to decommission the facility well in advance of the NRC's required time limit for decommissioning (which must occur no more than sixty years after the end of facility operations, or about 2036 for this facility). While PG&E must obtain project approvals from both the Coastal Commission and the NRC, decommissioning is not being immediately mandated by the NRC or any other regulatory body and PG&E could choose to maintain the site in its current condition for several more decades. PG&E is similarly conducting a Voluntary Site Cleanup pursuant to DTSC guidance rather than being compelled by DTSC to conduct cleanup activities.
- 6) The benefits of the project must result from the main purpose of the project, rather than from an ancillary component appended to the project to “create a conflict”.**
A project's benefits to coastal resources must be integral to the project purpose. If a project is inconsistent with a Chapter 3 policy, and the main elements of the project do not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot “create a conflict” by adding to the project an independent component to remedy the resource degradation. The benefits of a project must be inherent in the purpose of the project. If this provision were otherwise, project proponents could regularly “create conflicts” and then request that the Commission use Section 30007.5 to approve otherwise unapprovable projects. The balancing provisions of the Coastal Act could not have been intended to foster such an artificial and easily manipulated process, and were not designed to barter amenities in exchange for project approval. In this case, the project purpose is to remove contaminants, including some that are in an area affecting wetlands and sensitive habitat, in order to allow site restoration.
- 7) There are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.**
Finally, a project does not present a conflict among Chapter 3 policies if at least one feasible alternative would meet the project's objectives without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the balancing approach. If there are alternatives available that are consistent with all of the relevant Chapter 3 policies, then the proposed project does not create a true conflict among those policies.

In this instance, and as noted above, there are no alternatives that would allow removal of contaminants without adversely affecting wetlands because the contaminants are part of the sediment and soil matrix in and adjacent to the wetland area. Additionally, although PG&E could restore the area of affected wetlands at this location after removing the contaminants, those replacement wetlands would be located in the midst of other decommissioning and site remediation activities scheduled to occur over the next several years, and any restored habitat

values would be limited, at best. As described above in Section IV.E of these Findings, PG&E has proposed compensatory mitigation that is expected to result in significantly greater habitat values than those provided in this existing wetland.

Existence of a Conflict Between Chapter 3 Policies: Based on the above, the Commission finds that the proposed project presents a conflict between Section 30233(a), on the one hand, and Sections 30230, 30231, and 30240 on the other, that must be resolved through application of Section 30007.5, as described below.

Conflict Resolution

After establishing a conflict among Coastal Act policies, Section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. As noted previously, the project includes dredging and filling in wetlands for a use not allowed under Section 30233(a). However, denying the project because of its inconsistency with this policy would result in significant adverse effects on biological resources due to the ongoing risks associated with release of the contaminants. Additionally, the Commission's approval includes several Special Conditions that are necessary to ensure the project's adverse impacts are minimized and its benefits are fully realized. Therefore, the Commission finds that approval of the proposed project notwithstanding its inconsistencies with Coastal Act Section 30233(a) is "most protective of coastal resources" for purposes of the conflict resolution provisions of Coastal Act Section 30007.5.

V. CALIFORNIA ENVIRONMENTAL QUALITY ACT

On January 23, 2014, the Humboldt Bay Harbor, Recreation and Conservation District certified a Mitigated Negative Determination (CEQA State Clearinghouse No. 2013122032) for the proposed project. Section 13096(a) of the Commission's administrative regulations requires Commission approval of coastal development permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be 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 feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the activity may have on the environment.

Because the proposed project has the potential to result in significant adverse environmental impacts, the Commission has identified and adopted seven special conditions necessary to avoid, minimize, or mitigate these impacts. With the inclusion of these special conditions, the Commission finds that, within the meaning of the California Environmental Quality Act of 1970, there are no further feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect which the proposed project may have on the environment. Therefore, the proposed project, as conditioned, has been adequately mitigated and is determined to be consistent with CEQA.

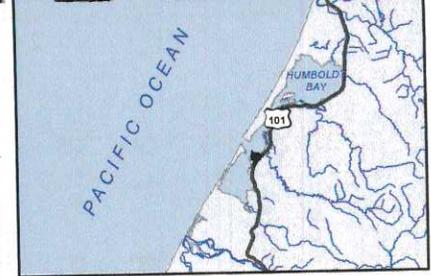
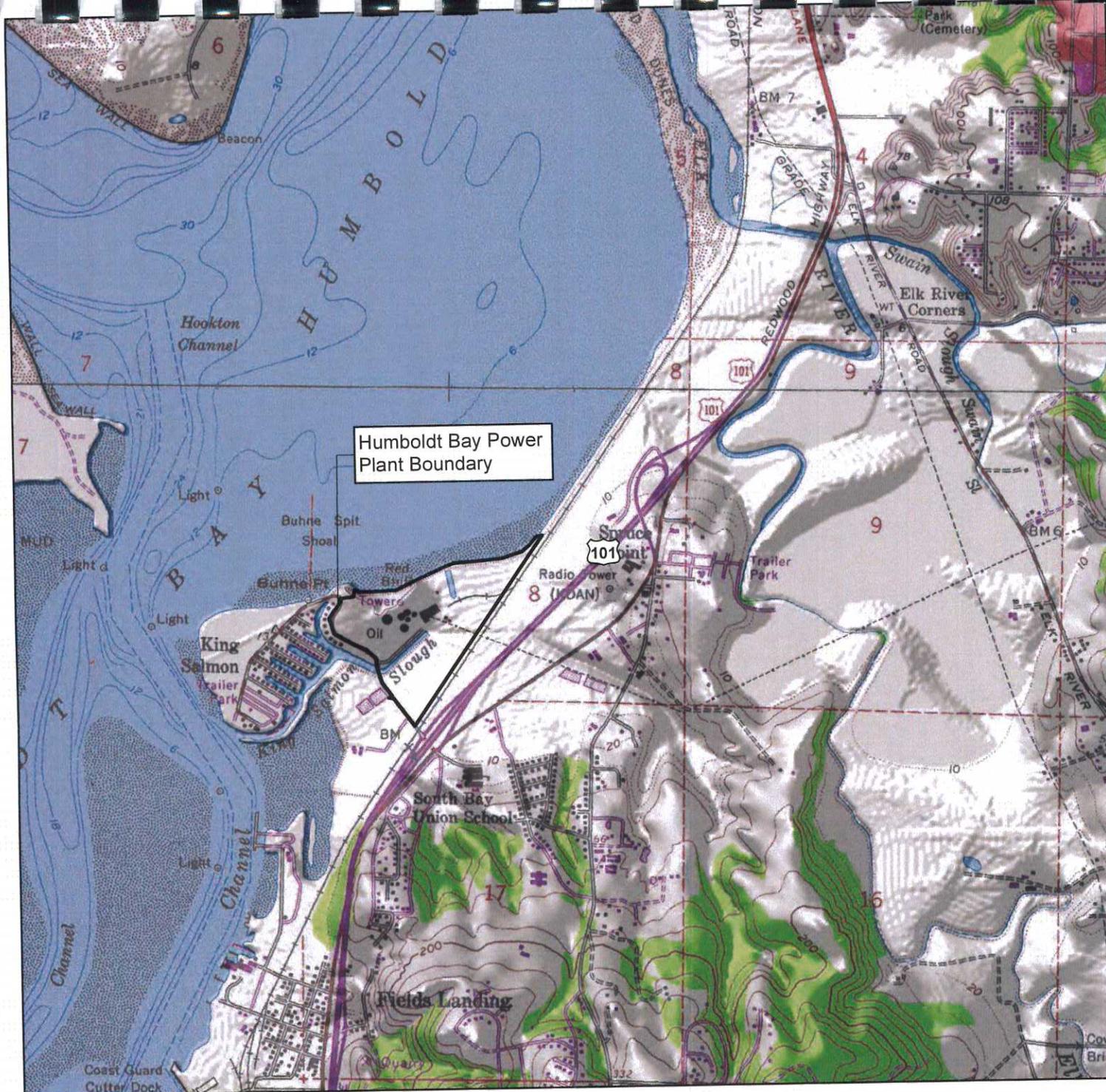
APPENDIX

Appendix A – Substantive File Documents

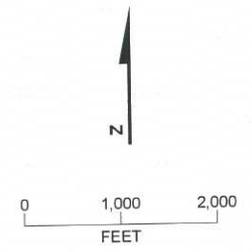
CH2M Hill, *Initial Study and Mitigated Negative Declaration – Humboldt Bay Power Plant Canal Remediation Project*, prepared for Humboldt Bay Harbor, Recreation, and Conservation District, December 2013.

_____, *Project Description and Coastal Resource Assessment – Humboldt Bay Power Plant Intake and Discharge Canal Remediation Project*, prepared for Pacific Gas & Electric Company, August 2013.

Stillwater Sciences, *Biological Mitigation and Monitoring Plan for the Humboldt Bay Power Plant Canal Remediation Project – Agency Review Draft*, November 2013.



LEGEND
 PROPERTY BOUNDARY



**9-13-0621
 EXHIBIT 1
 Location Map**

**FIGURE 1-1
 Location Map**
 PG&E Humboldt Bay Power Plant, Eureka, California

9-13-0621
 EXHIBIT 2
 Site Plan

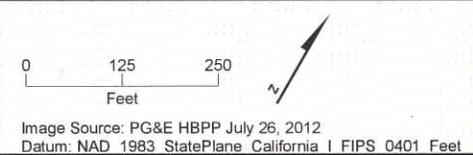
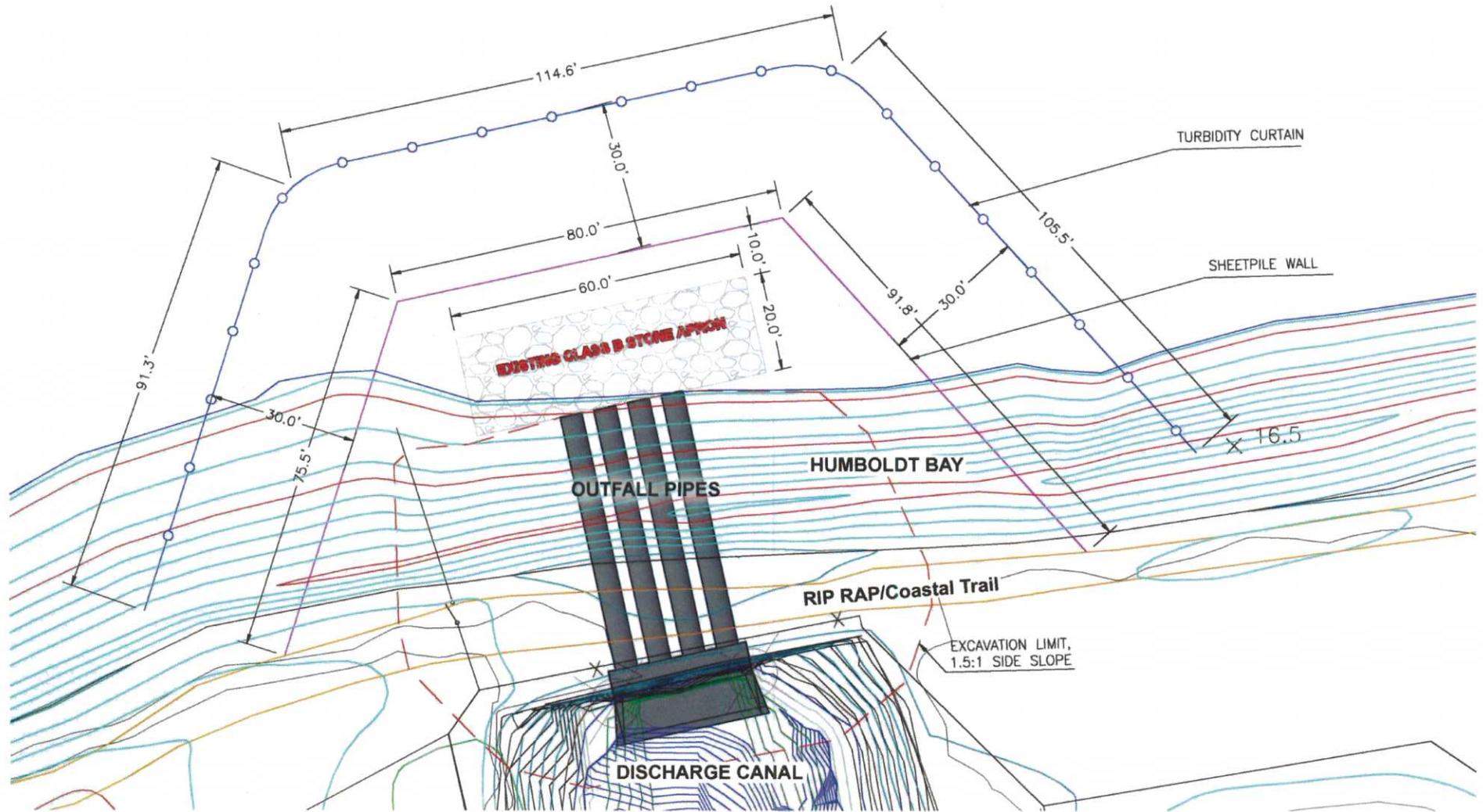
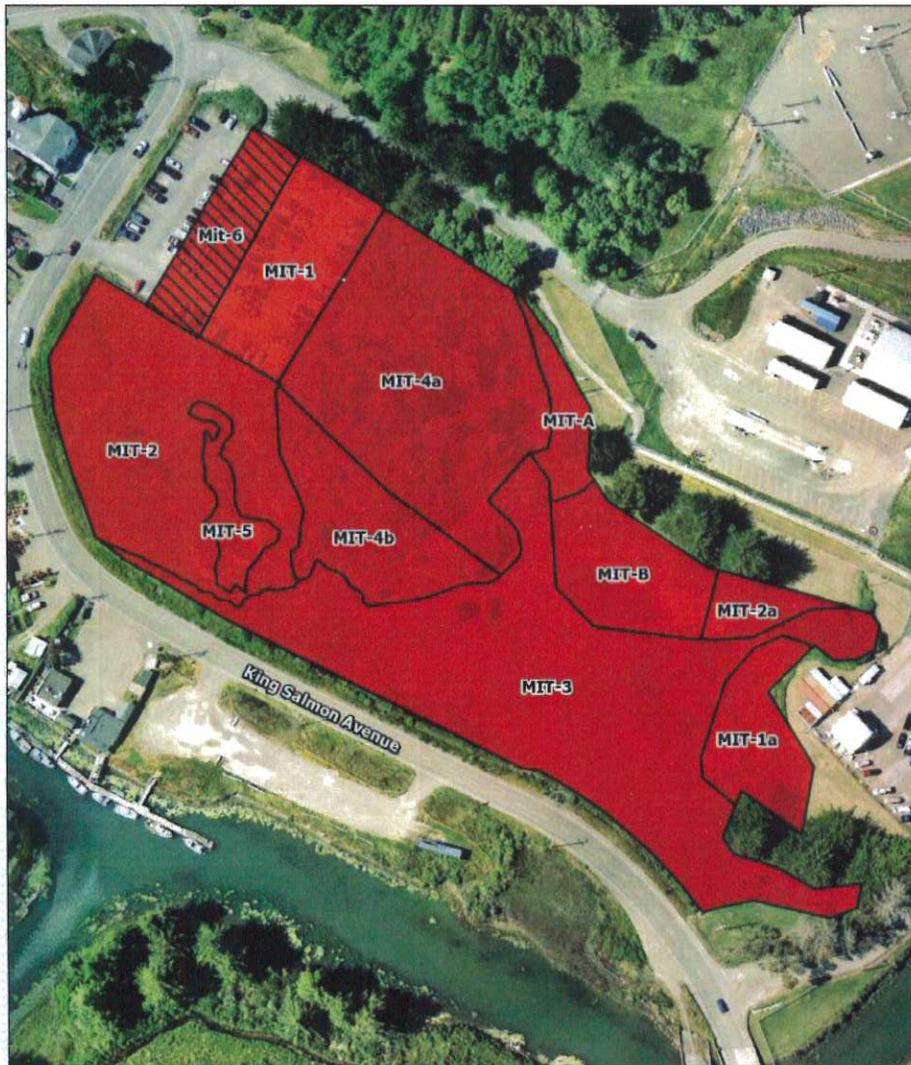


FIGURE 2-1
 Proposed Project Site Plan
 HBPP Canal Remediation Project
 PG&E Humboldt Bay Power Plant, Eureka, California

Discharge Canal Outfall Pipe Removal



Buhne Point Wetlands Preserve - Mitigation Area 6



HBPP Canal Remediation Project **Buhne Point Wetlands Preserve**
 Data sources: Imagery; CH2M HILL 2013

- Buhne Point Wetlands Preserve
- Mit-6 - proposed

0 50 100 Feet
0 2.5 5 10 Meters

Stillwater Sciences
www.stillwatersci.com



HBPP Canal Remediation Project **Proposed Mit-1 and Mit-6 Design**
 Data sources: Imagery; CH2M HILL 2013

- Buhne Point Wetland Preserve - existing
- Seasonal freshwater marsh
- Perennial grassland
- Riparian
- Swale

0 15 30 Feet
0 2.5 5 10 Meters

Stillwater Sciences
www.stillwatersci.com

Alpha Road Parking Mitigation Area

