



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY

LOS ANGELES DISTRICT CORPS OF ENGINEERS
P.O. BOX 532711
LOS ANGELES, CALIFORNIA 90053-2325

February 16, 2010

Office of the Chief
Planning Division

Mr. Tom Luster
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, California 94105

Dear Mr. Luster:

This letter is in response to your letter dated January 11, 2010, requesting additional information regarding the Consistency Determination #CD-002-10 for the Geotechnical and Hydrogeologic Feasibility Investigation Study in Cambria, San Luis Obispo County, California. For clarification, this study is a part of a U.S. Army Corps of Engineers (Corps) Federal study (Study). As stated in the Consistency Determination (CD), this Study proposes information gathering activities only and will not include the construction of any features or structures that are not described in this document. A desalination facility will not be constructed as a part of this geotechnical and hydrogeologic investigation. The test and monitoring wells involved in this Study are not part of any desalination facility and no desalination will occur from the installation of these wells; only information gathering as described in the CD will occur. All test and monitoring wells identified as part of this Study will be removed by the end of this Study. The proposed future seawater desalination facility will require a separate environmental document and administrative processing effort and is not included as part of this Study.

The Corps did not prepare and was not responsible for the information presented at the Cambria Community Service District (CCSD) January 5, 2010 meeting and, therefore, would not be subject to response to comments received at that meeting. However, in an effort to provide a thorough description of the Project, the Corps provides the following responses to all of the comments received in your letter.

General Requests for Additional Information and Analyses

1. Duration of Project. The Consistency Determination (CD) that was submitted for this Corps Study stated the correct time frame of one year from Study initiation. The Study currently is anticipated to begin between mid-March and early May, 2010. As identified in the schedule section of the CD, the total duration of the pump tests will require between two and four weeks to complete and equipment will be on the beach for a maximum of 10 hours per day. Additionally, only one monitoring well per test well currently is proposed to remain for up to one

year. All other wells will be removed after testing has been completed, approximately three months after Study initiation.

2. Landowner Approvals. The Department of Parks and Recreation (DPR) District Superintendent Nicholas Franco submitted a letter to you dated January 14, 2010, indicating that the California DPR intends to process a Right-of-Entry permit allowing the U.S. Army Corps of Engineers, or their agents, access onto state park property for the geotechnical feasibility sampling investigation within the Santa Rosa Creek Day use area. This letter was generated through the coordination efforts of the CCSD.

3.a. Site Access. Access to the site will be via the dirt parking lot adjacent to and south of the Shamel Park grassy lawn area. A 12-foot-wide emergency vehicle access road from the parking lot that is parallel to the fence separating the park from the beach will be used to access the emergency vehicle ramp onto the beach. The emergency vehicle ramp onto the beach is 10 feet wide. The emergency vehicle access road is gravel and the emergency vehicle ramp is concrete. A Chambers Group botanist identified the vegetation within the Project area on November 5 and 6, 2009, including the beach and along the access route. The vegetation along the access route consists of landscape ornamentals, including *Myoporum laetum* and *Cupressus macrocarpa*. No vegetation will need to be cleared or cut along the route.

3.b. Site Access. The existing beach access ramp at the Shamel Park is for emergency vehicle access to the beach (as indicated on the Park signage). Therefore, the ramp was designed and constructed as a rigid pavement for occasional use by emergency vehicles, such as fire trucks, rescue vehicles, ambulances, and police vehicles. Of these, fire trucks and rescue vehicles will be the heaviest loads. Based on visual observations, the ramp is constructed of Portland cement concrete (PCC) and is approximately 10 feet wide. The thickness of the PCC appeared to be approximately 6 inches. The existing sandy soils provide good support for rigid pavements. Assuming the ramp is supported on the existing sandy soil, the PCC ramp will function as a rigid pavement and should be able to support street legal vehicles, such as the emergency vehicles described above and the proposed drilling rigs and support vehicles. Fire trucks and some rescue vehicles weigh more than the proposed drilling rigs. The project most likely will not require work to strengthen the access ramp and the size of the ramp does not need to be increased. If damage to the access ramp is sustained during construction, the access ramp will be repaired to comply with emergency vehicle requirements.

Specific Comments and Requests

4. CCMP Sections 30210 – 30224 Public Access and Recreation. The Study now proposes to store equipment solely at the CCSD maintenance yard each weeknight and weekend night.

5.a. CCMP Sections 30230 – 30233 Marine Environment (CCMP Section 30230). The proposed Study avoids any project activities in the water, except for swimmers in the water for the hydrographic surveys, which would be similar to the recreational swimmer or diver in the area. Based on the current anticipated Study schedule, the Study would occur during the onset of

the grunion spawning season. However, as stated in Section 4.3 of the CCD, grunion are rare north of Point Conception and grunion runs at the northern extent of their range usually do not start early in the season. For example, in 2009, grunions were not observed north of Pt. Conception until June; but grunion runs along the central coast can start as early as May. As indicated in the CD, the Corps will have a biological monitor on site to determine if grunions are present. Based on the current anticipated Study schedule, the Study would occur during the nesting season for snowy plover; however, Section 4.3 of the CCD already provides a discussion for the potential for Study effects on snowy plover and that discussion does not change due to the current schedule. Therefore, based on the type of minimal project activity in the marine environment, the project would be in compliance with CCMP Section 30230.

5.b. CCMP Sections 30230 – 30233 Marine Environment (Marine Conservation Area).

Because the proposed Study will not enter the Cambria State Marine Conservation Area and will avoid any project activities in the marine environment, except for swimmers in the water, the proposed Study is consistent with the requirements of the state's Marine Conservation Area requirements.

5.c. CCMP Sections 30230 – 30233 Marine Environment (steelhead). Because the Study only requires swimmers in the water, the potential impacts to steelhead would be similar to impacts that recreational swimmers and divers in the area would have on steelhead. Steelhead most likely would avoid the area the swimmers are in. The Study also avoids any potential indirect water draw-down impacts caused by draining wells by conducting these tests only when 20 to 25 foot swells are present. Section 3.1.4 of the CD provides further analysis of the aquifer testing. Based on this analysis, the Study will not have any impacts to steelhead.

5.d. CCMP Sections 30230 – 30233 Marine Environment (sea otters). Carollo Engineers conducted a sound attenuation study for CCSD in August 2006, which included an assessment of sound levels anticipated in the ocean due to ultrasonic drilling at San Simeon State Beach. The Santa Rosa Creek Beach State Park environment would be comparable to the San Simeon State Beach. The sound attenuation study reported that the sound from the drill rig must first attenuate through the air before reaching the ocean/beach interface. Due to the difference in density and sound velocity of the air to water, little sound (e.g., 9 dB) would be transmitted to the water. Ocean surf is recorded at 75 dB. Based on this previous study, the project would not adversely affect sea otters or any marine mammals that may be adjacent to the site. Although the proposed Study is not expected to impact any marine mammals, sound attenuation management measures will be implemented to the extent practicable, such as the use of a side baffle or drill rig designed to attenuate sound.

5.e. CCMP Sections 30230 – 30233 Marine Environment (mercury contamination). The Study site is located on the beach between Santa Rosa Creek and the Pacific Ocean. Although documentation has been submitted to CCSD stating that mercury has been detected in and near Santa Rosa Creek and its associated sediments upstream of the creek mouth (i.e., Study site) and the Study site is likely within the Creek's historic channel area, the site characteristics for the

submitted documentation are not presented and were not demonstrated to be comparable to the Study site. Detailed sample locations, depth, and chain of custody is not provided. The known submitted document sampling sites are from in-channel sediments and not beach sand. Furthermore, there is no indication of the reliability of the samples, even if they were taken from the relevant location, because it is not clear that repetitive samples were taken. Sandy beach invertebrates are present only in the surface sand. There are no living organisms in the deeper sediment layers. Mercury can be converted to the organic form, methylmercury, which can bioaccumulate in foodchains. However, elevated mercury levels would not be expected to occur in the surface beach sand layer because the surface sand comes from the ocean and also is comprised of sediments with a large grain size that does not bind contaminants. Therefore, disturbance of the top layer of sand does not pose a risk to the food chain. Mobilizing sediments in the deeper layers also would not pose a threat because these sediments will be handled to avoid exposure to living organisms. The proposed geotechnical investigation presents no risk of exposing organisms to contaminants in sediments.

The Corps will implement the following measures to determine the presence and amounts of site contaminants:

A. For Groundwater sampling prior to initial startup of the pump tests:

A grab sample will be taken of groundwater from each of the groundwater test wells, for a total of three grab samples. Grab samples will be tested for the NPDES General Permit water quality criteria testing requirements for Order No. R3-2006-0063 Waste Discharge Requirements General Permit for Discharges With Low Threat to Water Quality - NPDES Permit CAG993001, according to attachment D (the list of CA Ocean Plan toxic chemicals, etc.).

AA. Disposal of Groundwater prior to initial startup of the pump tests:

The excess groundwater accumulated during grab sampling prior to initial startup will be stored on site in 55 gallon drums or appropriate roll-off containers. This excess groundwater will be disposed of on site at the point of generation (near the boreholes) if groundwater grab sample test results are negative for NPDES attachment D criteria. If groundwater does not meet criteria, the project will be halted and the groundwater disposed in accordance with requirements of the RWQCB.

B. For Groundwater sampling after startup of the pump tests:

If the grab samples from the initial startup of the pump tests are negative, then grab samples will be collected from the discharge point of each well, as it is pumped and tested for the criteria, as set forth in Section A-8 of the Waste Discharge Requirements General Permit for Discharges With Low Threat to Water Quality - NPDES Permit CAG993001. This testing will satisfy the monitoring and reporting sections of the permit.

Permit for Discharges With Low Threat to Water Quality - NPDES Permit CAG993001. This testing will satisfy the monitoring and reporting sections of the permit.

BB. Disposal of the groundwater pumped during the startup of the pump test:

This groundwater will be discharged directly to the ocean in accordance with the NPDES permit, if the testing criteria of attachment D are passed.

C. Testing and Disposal of Boreholes cuttings (soil) generated during the drilling and installation of the wells and all boreholes:

The cuttings (soil) from all of the boreholes will be tested for hazardous waste constituents according to toxicity only, as outlined in CA Title 22 requirements for determining hazardous waste for disposal. The results will be compared to the CA Title 22 and Federal Hazardous Waste standards for characterizing hazardous waste. The cuttings will be disposed of either as non-hazardous or hazardous waste at an offsite facility or location, depending upon the test results. The cuttings will be stored onsite, but can be stored offsite, if required, while awaiting analysis for disposal.

The Corps will implement the following measures to remediate those contaminants, if found:

If soil and/or water samples do not meet standards, then the discharge will be temporarily stored within containers or tanks for final disposal offsite. The soils will not be disposed of back into any of the boreholes drilled as part of this investigation. As currently planned, well bores will be filled with a bentonite slurry from the bottom of the well bore, taking caution to avoid expansion mid-well, to 10 feet below the lowest beach scour elevation. Native sand materials that are tested or certified free of toxic chemical contaminants will then be used to fill the remainder of the well.

5.f. CCMP Sections 30230 – 30233 Marine Environment (Hazardous Spill Prevention Plan).

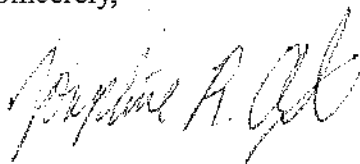
The type of drilling rig chosen for Study activities will not require drilling fluids. If this type of drilling rig is not available, the Hazardous Spill Prevention Plan will be modified to include language that specifies containers containing drilling fluids shall be kept above the beach area until transported. The Plan also will include the container's location and how often the collected material will be transported away from the project site as well as the expected response time for the Plan's primary spill response team.

6. CCMP Section 30240 – Environmentally Sensitive Habitat Areas. To avoid or minimize the amount of native vegetation on or near the beach affected by the Study, the Corps will have a biologist identify and guide the drilling rig pathway on the beach to avoid as much native vegetation as possible. Due to the dynamic nature of the Study site, the native vegetation on-site is scattered and sparse. Large swell events and wave run-up vary with the seasons and influence the amount of vegetation found on the beach. Because the vegetation on the beach is accustomed

to this dynamic environment and minimal amounts of vegetation will be flattened (none cut or removed), it would be expected to recover in a time frame similar to or more quickly than recovery from a large storm event. As stated in 3.a. of this letter, the vegetation and habitat type along the access route between the parking area and the project site is landscaped ornamental; there is no native vegetation along this route.

If you have any questions or requests for additional information, please feel free to contact Thomas W. Keeney at 213-452-3875 or myself at 213-452-3783, or via e-mail at Thomas.W.Keeney@usace.army.mil.

Sincerely,

A handwritten signature in black ink, appearing to read "Josephine R. Axt". The signature is written in a cursive style with a large initial "J" and "A".

Josephine R. Axt, Ph.D.
Chief, Planning Division