

Public Notice for Section 401 Water Quality Certification

**Crescent City – Wastewater Effluent Outfall Pipeline
WDID No. 1B05010WNDN**

Del Norte County

On January 31, 2005, the North Coast Regional Water Quality Control Board (hereinafter Regional Water Board) received an application from Mr. Michael Sweeney, on behalf of the City of Crescent City (hereinafter applicant), requesting Water Quality Certification and/or Waste Discharge Requirements (Dredge/Fill Projects) to install a new outfall pipeline from the City's wastewater treatment plant to the existing outfall located on the south side of the Battery Point Lighthouse in Crescent City, Humboldt County. The proposed project will cause disturbance to waters of the United States associated with the Pacific Ocean adjacent to the Smith River Plain Hydrologic Subarea No. 111.11.

The Crescent City Water Pollution Control Facility is owned by the City of Crescent City and is located between Howe Drive and B Street near the Battery Point Lighthouse. The wastewater treatment plant (WWTP) has reached its treatment and hydraulic capacity and as a result has occasionally exceeded its permitted discharge limits. Crescent City and Del Norte County completed a feasibility study that evaluated alternatives for wastewater treatment, biosolids disposal, and collection system and ocean outfall improvements. A directionally drilled outfall alternative was selected to reduce the environmental impacts associated with the construction of a new ocean outfall.

Construction of the new effluent outfall will begin at the existing WWTP. A 500-foot segment of 36-inch diameter ductile iron pipe will be installed below ground using conventional installation methods between the WWTP and the directionally drilled segment to the southwest. An approximately 1,700-foot section of 24-inch pipe will be installed between Howe Drive Park and the existing outfall on the south side of Battery Point Lighthouse using the horizontal directional drilling (HDD) method. The HDD drill rig will be set up on a pad at Howe Drive Park. Drilling operations will begin by boring a 4-inch diameter pilot hole. The pilot hole will be reamed to an interior diameter of about 32 inches. HDD uses a bentonite drilling fluid pumped under pressure through the drill stem to rotate a cutting head and to transport the cuttings to an earthen sump near the drill bit entry point. The drilling fluid and cutting are pumped through a processing unit to remove the cuttings and the fluid is reused. Drilling fluid will fill the borehole until the pipe is inserted. After new pipe is inserted through the borehole, inflatable plugs will be inserted in both ends and the new section of pipeline will be pressure tested. Drilling fluid and cuttings will be removed from the site and transported to a permitted facility when drilling is complete.

Weak or unconsolidated earthen material along the borehole pathway can allow drilling fluid to escape the borehole and rise to the surface. A geotechnical study was conducted to evaluate the potential for drilling fluid loss through fractures in the subsurface. The study identified slightly to moderately fractured siltstone and sandstone of the Battery Formation in the outfall area that could cause the release of drilling fluid to coastal waters. To mitigate for the potential loss of drilling fluid, injection grouting will be performed along an approximately 200-foot section of the pipeline alignment at the outfall end of the pipeline. The purpose of injection grouting is to plug rock fractures prior to drilling horizontally through the fractured area to reduce the risk of drilling fluid loss. Environmental controls for directional drilling and best management practices will be implemented to prevent impacts to water quality. The City has prepared and submitted a *Drilling Fluid Release Monitoring Plan* (Plan) for HDD. The Plan outlines monitoring procedures for the HDD operations to identify a loss of drilling fluid and to detect a release to the surface. The monitoring criteria and procedures contained in the City's Plan will be incorporated into the selected HDD Contractor's workplan. The HDD Contractor's personnel and Engineer's

personnel will attend onsite training prior to the start of construction that will cover the Plan, the need for environmental protection measures, permit conditions, and other related matters.

A stainless steel pressure vessel (manhole) will be installed near the end of the new outfall pipe. Construction of the manhole involves hand tools and labor to excavate a hole through native rock material and some existing concrete associated with the existing outfall pipe. Concrete waste will be hauled offsite. Native rock will be side cast to the adjacent ocean and shoreline area around the manhole.

The applicant has applied for authorization to perform the proposed project under Nationwide Permit No. 7 (File No. 24461N) from the United States Army Corps of Engineers, pursuant to the Clean Water Act, Section 404. Crescent City, as the lead California Environmental Quality Act agency, certified a Supplemental Environmental Impact Report for the project on February 22, 2005. A Lake or Streambed Alteration Agreement (1600 Permit) from the California Department of Fish and Game is not required for the project. The applicant anticipates the proposed project will be conducted between July and September 2005.

Regional Water Board staff is proposing to regulate this project pursuant to Section 401 of the Clean Water Act (33 USC 1341) and/or Porter-Cologne Water Quality Control Act Authority. In addition, staff will consider all comments received during a 21-day comment period that begins on the first date of issuance of this letter. If you have any questions or comments, please contact Regional Water Board staff member Dean Prat by phone at (707) 576-2801 or e-mail dprat@waterboards.ca.gov within 21 days of the posting of this notice.

March 25, 2005