

California Regional Water Quality Control Board, Los Angeles Region
April 3, 2003
462nd Regular Board Meeting (Los Angeles)

ITEM: 15

SUBJECT: Adoption of Mitigated Negative Declaration and Waste Discharge Requirements (File No. 94-073) for demonstrating and evaluating, at Naval Base Ventura County, Port Hueneme, a new device for measuring groundwater flux and solute flux.

PURPOSE: To conduct a public hearing that will allow all interested parties to submit their comments on the Mitigated Negative Declaration and Waste Discharge Requirements (File No. 94-073). Following the hearing, staff will ask the Board to adopt the Mitigated Negative Declaration and Tentative Waste Discharge Requirements.

BACKGROUND: The United States Navy, Naval Base Ventura County, Port Hueneme filed a Report of Waste Discharge on September 11, 2002, for the discharge of up to 13 alcohols to groundwater near 32nd Avenue and Patterson and Pacific Roads, within the Naval Base.

Naval Base Ventura County, Port Hueneme is a U.S. Department of Defense facility, owned by the U.S. government. Naval activities began at the Base in 1940. The facility is an active military facility with a deep-water port used for the transport of heavy equipment and supplies. Before 1940, the area was agricultural.

A plume of groundwater contaminated with dissolved fuel hydrocarbons, including benzene, toluene, ethylbenzene, xylenes, (BTEX) and methyl tertiary butyl ether (MTBE), is present downgradient of the Naval Exchange (NEX) gas station. The gas station, built in 1950, is located at the southeast corner of 23rd Avenue and Dodson Street. Detectable MTBE is present approximately 5,400 feet downgradient (southwest) of the former tank area at the NEX. Detectable BTEX is present approximately 1,000 feet downgradient of the former tank area. The plume at the demonstration areas will contain only MTBE. Site hydrogeology is well known, as numerous remediation technology demonstration projects have been conducted at the base. A clay-rich zone at about 22 feet below grade acts as an aquitard, preventing significant vertically downward movement of chemicals in groundwater. If adversely impacted groundwater were to flow downgradient, it would be removed by a system of extraction wells installed by the Navy to contain and control the MTBE plume.

The demonstration will be conducted at three plots; location A-1, location A-2, and location B. Locations A-1 and A-2 cover a total area measuring about 100 feet by 25 feet and location B measures about 25 feet by 25 feet. Locations A-1 and A-2 are immediately adjacent to each other, and

about 2000 feet from location B. The proposed test plots are adjacent to and/or within existing test plots used in the past by UC Davis, Equilon Corporation, and Envirogen, for in situ bioremediation demonstrations. A maximum of 618 grams of alcohols will be released.

Although the subject facility is located beneath an active military facility adjacent to the Pacific Ocean and the port at Port Hueneme, an area within the Oxnard Plain Groundwater Basin degraded by seawater intrusion, the underlying groundwater is designated for beneficial uses including municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply, as defined in *The Water Quality Control Plan for the Los Angeles Region* (adopted on June 13, 1994). As such, actions must be taken to maintain the beneficial uses of the impacted groundwater.

**REGULATORY
ISSUES:**

Any injection of alcohols into the groundwater is a discharge of waste as defined in Section 13260 of the California Water Code. However, the permitted discharge is consistent with the anti-degradation provisions of State Water Resources Control Board Resolution No. 68-16 (Anti-degradation Policy). The discharge of alcohols is intended to provide information on an effective and efficient method of measuring the flux of chemicals and groundwater. This information is universally applicable to site remediation and assessment.

The alteration of local groundwater quality will be temporary and minor. The released alcohol tracers are expected to raise the concentrations of these compounds in the shallow perched groundwater immediately beneath the field demonstration areas, but are expected to be readily biodegraded. The released alcohol tracers are expected to be at very low or not detectable concentrations if they migrate beyond the demonstration areas. An MTBE plume containment and control system is operating downgradient of the field demonstration areas, and will intercept any contaminants that may reach that point. When completed, the field demonstration may provide information that has the potential for widespread application throughout the country.

This Regional Board has assumed lead agency role for this project under the California Environmental Quality Act and has conducted an Initial Study (in the format of an expanded Environmental Checklist) in accordance with Title 14, California Code of Regulations, Section 15063, entitled Guidelines for Implementation of the California Environmental Quality Act.

Copies of the Environmental Checklist, the Mitigated Negative Declaration and Tentative Waste Discharge Requirements were transmitted to all agencies and persons known to be interested in the matter.

CONCLUSION: These Waste Discharge Requirements, as proposed, are fully protective of groundwater.

OPTIONS:

- 1) Adopt
- 2) Adopt with modifications to the Waste Discharge Requirements
- 3) Deny the Mitigated Negative Declaration and Waste Discharge Requirements.

RECOMMENDATION:
Adopt the Mitigated Negative Declaration and Waste Discharge Requirements.

ATTACHMENTS:

1. Resolution
2. Environmental Checklist with the Mitigated Negative Declaration
3. Fish and Game Commission California Department of Fish and Game Certificate of Fee Exemption, De Minimus Impact Finding
4. Notice of Preparation of Mitigated Negative Declaration, California Environmental Quality Act
5. Tentative Waste Discharge Requirements
6. Tentative Monitoring and Reporting Requirements
7. Cost Analysis
8. Discharge Requirements Summary