

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

RESOLUTION NO. R06-019

APPROVING THE ENVIRONMENTAL CHECKLIST AND
ADOPTING A MITIGATED NEGATIVE DECLARATION FOR A
TECHNOLOGY DEMONSTRATION TO EVALUATE IN SITU BIOREMEDIATION OF
PERCHLORATE IN SHALLOW GROUNDWATER, AREA 11, FORMER WHITTAKER-
BERMITE FACILITY, SANTA CLARITA, CALIFORNIA
(FILE NO. 06-114)

WHEREAS, the California Regional Water Quality Control Board, Los Angeles Region finds that:

1. California Water Code (CWC) section 13260(a)(1) requires that any person discharging wastes, or proposing to discharge wastes other than into a community wastewater collection system, which could affect the quality of the waters of the State, shall file a report of waste discharge (ROWD) with the Regional Water Quality Control Board (Regional Board) exercising jurisdiction in the area, and that Regional Board shall then prescribe requirements for the discharge or proposed discharge of wastes.
2. The Whittaker-Bermite Company previously owned the property at 22116 Soledad Canyon Road, in Santa Clarita, California (Facility). The property is now owned by Santa Clarita LLC, a developer. The Technology Demonstration, to be conducted by the Army Corp of Engineers (Discharger), will take place on approximately 4,000 square feet of the property. The full property is approximately 996 acres. The property was first subdivided in 1912. From 1934 to 1936, the Bermite facility was used to manufacture dynamite under the ownership of the L.A. Powder Company. The Halifax Explosives Company manufactured fireworks there from 1936 to 1942. In 1939, Golden State Fireworks also manufactured fireworks at the facility. In 1942, E.P. Halliburton manufactured oil field explosives there. Production by the Bermite Powder Company occurred from 1942 to 1967, and included flares, explosives, detonators, fuses, boosters, coated magnesium, and stabilized red phosphorus. In 1967, Whittaker took ownership of the property. Whittaker manufactured 20-millimeter (mm) and 30-mm cannon shells, detonators, fuses, boosters, flares, signal cartridges, tracers, pyrophoric pellets, rocket motors, torpedo gas generators, oil field explosives, JATO boosters, and artillery and missile main explosive charges. The current owner, Santa Clarita LLC, plans to redevelop the property and build more than 2900 dwelling units and associated retail, office, and commercial buildings.
3. Soil and groundwater beneath the Facility are primarily contaminated with perchlorate, perchloroethene (PCE), and trichloroethene (TCE).
4. The Discharger conducted a technology demonstration at the Facility to evaluate the remediation of perchlorate shallow groundwater by enhanced in-situ bioremediation. In-situ bioremediation involves the addition of amendments (citric acid and diammonium phosphate) to the shallow groundwater. Details of the technology demonstration methods are included in the February 9, 2006, "Technology Demonstration Plan-Revised In Situ Bioremediation of Perchlorate in Area 11 Alluvium Groundwater" prepared by Shaw Environmental, Inc.

5. The Discharger has filed a Report of Waste Discharge and applied for Site-Specific Waste Discharge Requirements to use citric acid and diammonium phosphate for the bioremediation of perchlorate at this Facility. The Report of Waste Discharge was deemed complete by the Regional Board in a letter dated June 22, 2006.
6. Groundwater beneath the Facility is unconfined, occurs approximately 25 feet below grade, with the direction of flow varying across the Facility but generally toward the northwest. The Discharger shall monitor concentration of injection solution and contaminants and evaluate flow conditions and any potential for migration of contaminants outside the remediation areas. As specified in the Waste Discharge Requirements and Notice of Preparation of Mitigated Negative Declaration, the Discharger will provide hydraulic control to prevent offsite migration. Monitoring of groundwater quality and flow conditions across the entire Facility is required by a comprehensive separate Facility-wide groundwater monitoring program.
7. The injection of the citric acid, diammonium phosphate, sodium bromide, and chlorine dioxide to the groundwater is a discharge of waste pursuant to section 13260 of the California Water Code. However, the discharge of the citric acid and diammonium phosphate is intended to provide more efficient remediation of perchlorate-contaminated groundwater and is anticipated to reduce cleanup time and costs.
8. The Water Quality Control Plan (Basin Plan) for the Los Angeles Region designates the beneficial uses of groundwater in the Santa Clara – Bouquet and San Francisquito portion of the Eastern Santa Clara River Groundwater Basin as municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.
9. 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 may result in some localized temporary exceedance of background concentrations of constituents such as and concentrations of total organic carbon, chloride, iron, manganese, phosphorus, arsenic, and total dissolved solids (TDS), and certain microorganisms, but this is not anticipated to result in any long-term groundwater degradation.
10. The Regional Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations. The Regional Board, in a public meeting on October 24, 2006, heard and considered all comments pertaining to the discharge and to the tentative requirements.
11. This Regional Board has responsibility for preparation of these Waste Discharge Requirements under the California Environmental Quality Act (Public Resources Code section 21000 et seq.) 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, titled Guidelines for Implementation of the California Environmental Quality Act. Based on the Initial Study, Regional Board prepared a Mitigated Negative Declaration that the project will not have a significant adverse effect on the environment.

12. Copies of the Environmental Checklist and proposed Mitigated Negative Declaration were transmitted to the State Clearing House, all agencies and interested parties. All comments received have been addressed by Regional Board staff. The Regional Board considered all testimony and evidence at a public hearing held on October 24, 2006, at the City of Simi Valley Council Chambers, 2929 Tapo Canyon Road, Simi Valley, California, and good cause was found to approve the Environmental Checklist and adopt a Mitigated Negative Declaration.
13. The Regional Board has reviewed the Initial Study and Mitigated Negative Declaration concerning this Resolution prepared by staff in compliance with the California Environmental Quality Act (Public Resources Code section 21000 et seq.). The Regional Board concurs with the staff findings that a Mitigated Negative Declaration should be adopted. The Initial Study and Mitigated Negative Declaration were circulated for public review and comment.

THEREFORE, BE IT RESOLVED that the Regional Board:

1. Adopts the Environmental Checklist, Initial Study and Mitigated Negative Declaration and directs the Executive Officer to file a Notice of Determination with the State Clearinghouse within 30 days as required by the California Code of Regulations.
2. Directs that a copy of this Resolution shall be forwarded to the State Water Resources Control Board and all interested parties.
3. Directs that the discharge of amendments into the soil and groundwater shall conform with all the requirements, conditions, and provisions set forth in A. "Discharge Limits" and B. "Discharge Specifications" of the ORDER NO. R4-2006-0076.

CERTIFICATION

I, Jonathan Bishop, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Los Angeles Region on October 24, 2006.

fn David A. Bachorowski, AEO
Jonathan Bishop
Executive Officer

October 24, 2006
Date