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

RESOLUTION NO. R11-001

APPROVING THE ENVIRONMENTAL CHECKLIST AND
ADOPTING A MITIGATED NEGATIVE DECLARATION FOR
IN-SITU ENHANCED ANAEROBIC BIOREMEDIATION OF
VOLATILE ORGANIC COMPOUNDS IMPACTED GROUNDWATER,
FORMER ANADITE SOUTH GATE FACILITY,
SOUTH GATE, CALIFORNIA
(FILE NO. 97-019)

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 Former Anadite South Gate Facility (Facility) is located at 10647 Garfield Avenue in the City of South Gate, California (Latitude 33° 55' 56"N, Longitude -118° 10' 2"W). The Facility where the proposed remediation is going to be implemented is currently owned and administered by Anadite California Restoration Trust (hereafter Discharger). The Facility is approximately 3.4 acres and located approximately 2,200 feet east of the Long Beach Freeway (710 Freeway), 1,800 feet east of the confluence of the Los Angeles and Rio Hondo Rivers. The Facility is bordered by a paved parking lot and residential houses on the north, Garfield Avenue on the east, Meadow Road on the south, and Sessler Street on the west.

3. The Facility was involved in industrial plating, coating, chemical milling, and hard anodizing activities from the early 1950s until 2007, and operated as Anadite South Gate. Since 2007 the Facility has been occupied by Garfield Metal Finishing and conducts limited metal finishing operations. During the time of operation by Anadite South Gate, the Facility infrastructure included a paint shop, above ground process tanks used for immersion/treating metal products, storage buildings, and offices related to metal processing operations.

4. The Discharger has been conducting soil and groundwater investigations since 1991 under the oversight of the Regional Board pursuant to Cleanup and Abatement Order No. 98-004. A total of 65 groundwater monitoring wells have been installed on and off site at different depths to monitor the groundwater conditions and quality at the Facility and vicinity. Results from the soil and groundwater assessments indicate that the primary compounds of concern are the following chlorinated volatile organic compounds (VOCs): trichloroethylene (TCE), tetrachloroethylene (PCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), vinyl chloride (VC), and 1,4-dioxane (dioxane).

5. The "Final Groundwater Remediation Pilot Study Report and Remedial Action Plan", approved by the Regional Board, identified twelve candidate technologies for groundwater remediation. From the twelve candidates, enhanced anaerobic bioremediation (EAB) followed by monitored natural attenuation (MNA) was proposed. Regional Board approved only EAB technology as an interim measure to remediate the source zone area.

6. The "Groundwater Remedial Design and Implementation Plan", approved by the Regional Board, described the major components of EAB technology, and proposed an electron donor evaluation and laboratory treatability study to determine the appropriate electron donor and bioaugmentation culture to be used. A Bench-Scale Treatability Study Report recommended glycerin as a primary electron donor and Shaw's SDC-9™ as a primary culture.

7. To address the groundwater contamination, the Discharger proposes to inject an electron donor (primarily lactate (either as sodium lactate or lactic acid), glycerin, waste glycerin, whey powder, or emulsified vegetable oil [EVO-Newman Zone™ or EOS™]); and amended with a non-pathogenic, naturally derived, chlorinated ethene degrading bacterial culture (Shaw's SDC-9™ or SiREM's KB-1™) to create a reducing condition in groundwater to facilitate reductive dechlorination of chlorinated VOCs.

8. If necessary, low concentrations of biofuling control chemicals (chlorine dioxide or sodium hypochlorite) may be added to the treatment area as part of well maintenance. A tracer such as potassium or sodium bromide may be added to the re-injected groundwater to improve the understanding of the local hydraulics.

9. Groundwater beneath the site and vicinity is unconfined and has been encountered at approximately 46 feet below ground surface. The direction of groundwater flow at different zones varies, but is generally toward to the south.

10. The Discharger shall monitor for the presence and concentration of injection solution and contaminants and evaluate flow conditions and any potential for migration of contaminants outside the treatment area. As specified in the Waste Discharge Requirements and Notice of Preparation of Mitigated Negative Declaration, the Discharger shall provide hydraulic control, if necessary, to prevent offsite migration. Monitoring of groundwater quality and flow conditions across the entire VOCs plume is required by a comprehensive separate plume-wide groundwater monitoring program.

11. The application of electron donor amendment and bioaugmentation cultures to groundwater may result in temporary adverse impacts to groundwater quality, but impacts that may result will be localized, and of short-term duration, and will not impact any existing or prospective uses of groundwater.

12. The Water Quality Control Plan (Basin Plan) for the Los Angeles Region designates the beneficial uses of groundwater in the Central Basin for municipal and domestic supply, industrial process supply, industrial service supply, and agricultural supply.

13. 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 exceedance of background concentrations of constituents such as total organic carbon, VOCs, and total dissolved solids, but this is not anticipated to result in any long-term groundwater degradation.

14. This Regional Board has assumed lead agency role for this project under the California Environmental Quality Act (CEQA) [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 CEQA. Based on the Initial Study, Regional Board prepared a Mitigated Negative Declaration documenting that the project will not have a significant adverse effect on the environment.

15. 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 comments and recommendations. The Regional Board, in a public meeting on February 3, 2011, heard and considered all comments pertaining to the discharge and to the tentative requirements.

16. Copies of the Environmental Checklist and proposed Mitigated Negative Declaration were transmitted to the State Clearinghouse, 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 February 3, 2011 at the Metropolitan Water District of Southern California, Board Room, Los Angeles, located at 700 North Alameda Street, Los Angeles, California (date and location may change), and good cause was found to approve the Environmental Checklist and adopt a Mitigated Negative Declaration.

17. The Regional Board has reviewed the Initial Study and Mitigated Negative Declaration concerning this Resolution prepared by staff in compliance with the CEQA (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 electron donors and bacterial cultures into groundwater shall conform with all the requirements, conditions, and provisions set forth in *A. "Discharge Limits" and B. "Discharge Specifications"* of the ORDER NO. R4-2011-0036.

CERTIFICATION

I, Samuel Unger, 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 February 3, 2011.

Samuel Unger, P.E.
Executive Officer