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

RESOLUTION NO. R05-011

APPROVING THE ENVIRONMENTAL CHECKLIST AND ADOPTING A MITIGATED NEGATIVE DECLARATION FOR PILOT TESTS TO EVALUATE IN-SITU BIOREMEDIATION OF VOLATILE ORGANIC COMPOUNDS IN SHALLOW GROUNDWATER, THE BOEING COMPANY, FORMER COMPTON FACILITY, COMPTON, CALIFORNIA (FILE NO. 96-056 and 96-057)

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 Boeing Company (Discharger) previously owned the Former Compton Facility located at 233 East Manville Street and 157 and 200 East Stanley Street in Compton, Los Angeles County, California (Facility). The Facility is 10 acres and was formerly used between approximately 1955 and 1969 by North American Aviation (NAA), Rockwell International's (Rockwell) Autonetics Division, and Rockwell's Space Division (collectively: NAA/Rockwell) for aerospace manufacturing operations, production of military electronic components including radar and missile guidance systems, and manufacturing of electronic components for the National Aeronautics and Space Administration (NASA) rocket programs. Since 1969 the site has been occupied by various companies and has been used primarily for industrial manufacturing, the roofing industry, distribution of SCUBA gear, and the molding of plastic products. The Discharger sold the property in 2004 but is continuing assessment and remediation activities. The new owner is redeveloping the property.
- 3. Soil and groundwater beneath the Facility is contaminated with volatile organic compounds (VOCs) including trichloroethene (TCE), perchloroethene (PCE), and cis-1,2-dichloroethene (cis-1,2,-DCE).
- 4. The Discharger conducted a pilot test at the Facility to evaluate the remediation of chlorinated VOCs in shallow groundwater by enhanced in-situ bioremediation with bioaugmentation to remediate selected source areas. In-situ bioremediation involves the addition of carbon source amendments (i.e. lactate, edible oils, ethanol, etc.) to the shallow groundwater. Bioaugmentation involves the addition of selected non-pathogenic (naturally derived, not genetically engineered) chlorinated ethene-degrading Dehalococcoides ethenogenes culture, referred to as KB-1, in select areas to facilitate reductive dechlorination. Details of the remediation and methods are included in the pilot test work plan, "Former Compton Site In-Situ Reactive Zone Pilot Test Workplan," dated February 3, 2003, prepared by Arcadis G&M, approved on February 26, 2003.

- Carbohydrate solutions are being used to induce in-situ bioremediation in a number of similar remediation efforts throughout this Region. Therefore, on January 24, 2002, This Regional Board adopted Order No. R4-2002-0030 "General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel and/or Volatile Organic Compound Impacted Sites" (General WDR).
- 6. The Discharger has filed a Report of Waste Discharge and applied for General Waste Discharge Requirements to use carbohydrate solution at this Facility. To expedite groundwater remediation at the Facility, the Regional Board, through its Executive Officer, granted the Discharger coverage under the General WDR on July 22, 2003, and issued a Monitoring and Reporting Program No. CI-8520 for the injection of carbohydrate solution.
- 7. The General WDR allows the injection of carbohydrate solution, but does not specifically provide for the addition of KB-1. The Discharger has filed a Report of Waste Discharge and applied for Site-Specific Waste Discharge Requirements (WDR) to add KB-1 to the shallow groundwater. Site-Specific WDR have been developed for the addition of KB-1 at this Facility in conjunction with the existing General WDR. These Site-Specific WDR will also cover the injection of the carbohydrate solution currently covered under the existing General WDR, which will be rescinded once the Site-Specific WDR has been issued.
- 8. Groundwater beneath the Facility is unconfined and the direction of flow varies across the Facility but is generally toward the north-northwest. The Discharger shall monitor presence and 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, if necessary, 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.
- 9. The injection of the carbohydrate solution with KB-1 to the groundwater is a discharge of waste pursuant to section 13260 of the California Water Code. However, the discharge of the carbohydrate solution with KB-1 is intended to provide more efficient remediation of VOC-contaminated groundwater and is anticipated to reduce cleanup time and costs.
- 10. 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.
- 11. 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 (TDS), but this is not anticipated to result in any long-term groundwater degradation.
- 12. 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 6, 2005, heard and considered all comments pertaining to the discharge and to the tentative requirements.

- 13. This Regional Board has assumed lead agency role for this project 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.
- 14. 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 6, 2005, at the Metropolitan Water District of Southern California, Board Room, 700 North Alameda, Los Angeles, California, and good cause was found to approve the Environmental Checklist and adopt a Mitigated Negative Declaration.
- 15. 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 and microorganisms 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. R5-2005-0068.

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 6, 2005.

Jonathan Bishop Executive Officer Date