



California Regional Water Quality Control Board
Central Valley Region
Katherine Hart, Chair



Linda S. Adams
Acting Secretary for
Environmental Protection

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Edmund G. Brown Jr.
Governor

8 July 2011

Mr. Kent Hawley
9 CES/CEVR
6601 B Street
Beale Air Force Base, CA 95903-1708

**TENTATIVE NOTICE OF APPLICABILITY OF GENERAL ORDER NO. R5-2008-0149-32
UNITED STATES AIR FORCE – BEALE AIR FORCE BASE IN-SITU GROUNDWATER
REMEDiation OF VOLATILE ORGANIC COMPOUNDS USING POTASSIUM
PERMANGANATE AT SITE 3, YUBA COUNTY**

The United States Air Force – Beale Air Force Base (Discharger) submitted a Notice of Intent, dated 27 September 2010, requesting coverage under General Order No. R5-2008-0149, General Waste Discharge Requirements for In-situ Groundwater Remediation at Sites with Volatile Organic Compounds, Nitrogen Compounds, Perchlorate, Pesticides, Semi-Volatile Compounds and/or Petroleum Compounds. Based on information in your submittal, it is our determination that this project meets the required conditions to be approved under Order No. 2008-0149. All of the requirements contained in the general order are applicable to your project.

Project Location:

The project is at Beale Air Force Base in Yuba County,
Township/Range/Section: T 14N R5E S4 Mount Diablo B&M

Project Description:

Operations at the Site 3 at Beale Air Force Base caused pollution of the soil and groundwater. The primary pollutants of concern are volatile organic compounds (VOCs). The primary VOC detected in soil and groundwater is trichloroethylene (TCE). Site 3 had an operating soil vapor extraction (SVE) system, which provided cleanup of TCE pollution that was related to operations at several fire training exercise areas located at Site 3. The SVE system was shut down in 2009. Additional remedial investigations in 2010 were performed downgradient of the area addressed by the former SVE system. An additional VOC source area was discovered during the 2010 remedial investigation. The VOC source area could be related to fire training areas, or could be related to an unknown release near a dry well that is located within the footprint of the treatability study area.

For this project, the Discharger will construct 6 injection wells that will be completed to a depth of 70 feet below ground surface. The injection wells are located within the target treatment zone, which encompasses the 350 µg/L TCE plume. The treatability study area will cover an

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approximate 42,000 square-foot area. The treatment zone is estimated to be 15 feet thick based on the remedial investigations performed at the site. The Discharger proposes to inject 30,000 gallons of 5,000 milligram per liter (mg/L) concentration permanganate solution. The estimated injection flow rate is proposed to be 10 gallons per minute for each injection well. The injections will occur over a 5-day period.

The Discharger will also be conducting sampling and reporting the results as described in the attached Groundwater Monitoring and Reporting Program. If the Discharger desires to conduct longer-term in-situ remediation of the groundwater, a revised Notice of Intent must be submitted and a new Notice of Applicability received prior to proceeding with the additional remediation.

General Information:

1. The project will be operated in accordance with the requirements contained in the General Order and in accordance with the information submitted in the Notice of Intent.
2. The Discharger shall comply with the General Order No. R5-2008-0149
3. Injection of materials other than those specified in the Notice of Intent into the subsurface is prohibited, unless analysis, as specified in the Order No. R5-2008-0149, of the injectant is provided and approval is given by Board staff.
4. Failure to abide by the conditions of the General Order could result in an enforcement action as authorized by provisions of the California Water Code.
5. The Discharger shall comply with the attached Monitoring and Reporting Order No. R5-2008-0149, and any revisions thereto as ordered by the Executive Officer.
6. The Discharger has provided a Contingency Plan that would be implemented if dissolved chromium, manganese or permanganate concentrations are detected above the baseline concentration or the maximum contaminant level (MCL) in downgradient compliance monitoring wells

If you have any questions regarding this matter, please contact Robert Reeves at (916) 464-4651 or by email him at reeves@waterboards.ca.gov.

PAMELA C. CREEDON
Executive Officer

Attachments

Tentative Monitoring and Reporting Order R5-2008-0149-032
Preparation of Notice of Applicability
General Order No. R5-2008-0149

cc:

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