

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

REVISED MONITORING AND REPORTING PROGRAM NO. 98-053

FOR

DEFENSE LOGISTICS AGENCY
DEFENSE DISTRIBUTION DEPOT SAN JOAQUIN, TRACY
OPERABLE UNIT 1 GROUNDWATER TREATMENT SYSTEM
SAN JOAQUIN COUNTY

This Monitoring and Reporting Program (MRP) describes requirements for monitoring the discharge of treated groundwater to land. This MRP is issued pursuant to Water Code Section 13267. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. This MRP does not provide requirements for groundwater extraction and monitoring wells. Monitoring of wells is addressed through a groundwater monitoring program developed by the Defense Logistics Agency as part of the CERCLA cleanup efforts. This program is approved by U.S. Environmental Protection Agency, Department of Toxic Substances Control and Central Valley Water Board staff.

All samples should be representative of the volume and nature of the discharge or matrix of material sampled. The time, date, and location of each sample shall be recorded on the sample chain of custody form.

GROUNDWATER TREATMENT SYSTEM MONITORING

The influent and effluent flows shall be monitored in accordance with the frequencies found in Table 1 using the analytical methods provided in Table 2, below.

Table 1: Groundwater Treatment System Monitoring

Sample Location¹	Target Parameters	Minimum Sampling Frequency
Mid-Point	Pesticides ² , Volatile Organic Compounds ²	Monthly
Influent and Effluent	Pesticides ² , Volatile Organic Compounds ² , Total Petroleum Hydrocarbons as Diesel ³	Quarterly ⁴
Influent and Effluent	Total Chromium	Every Two Years
Influent and Effluent	Flow Rate	Continuous
Effluent	pH, Temperature, Specific Electrical Conductance	Monthly

- 1 Includes both air-stripping and liquid granular activated carbon (LGAC) treatment systems. The Discharger is planning to convert all groundwater treatment operations to LGAC in Spring 2015. Influent samples shall be collected from the inlet sampling port and effluent samples shall be collected after treatment. Mid-point samples shall be collected in between LGAC vessels. Detections of pesticides or volatile organic compounds (VOCs) at or above effluent limitations in the mid-point sample shall trigger a carbon change-out within thirty (30) days.
- 2 Discharger shall report all pesticide and VOC detections in effluent to Regional Board staff within 72 hours of receipt of lab results. Discharger shall immediately shutdown the treatment plant if pesticides or VOCs are detected in effluent samples at concentrations equal to or above Federal or State Maximum Contaminant Levels (MCLs).
- 3 The sample frequency can be reduced to annual after one year of quarterly monitoring if Total Petroleum Hydrocarbons as Diesel are not detected in effluent samples.
- 4 Until all groundwater treatment operations are converted to LGAC and the start-up phase (4 weeks) for the new treatment system is completed, influent and effluent samples shall be collected monthly (at a minimum) for pesticides and VOCs.

Table 2: Analytical Methods

Parameters	EPA Analytical Method^{1,2}	Maximum Practical Quantitation Limit
Volatile Organic Compounds (VOCs)	EPA Method 8260	0.5 µg/L
Pesticides	EPA Methods 8081 and 8321	Various
Total Petroleum Hydrocarbons as Diesel	EPA Method 8015B	50 µg/L
Total Chromium	EPA Method 6010B	10 µg/L

- 1 Discharger must analyze and report full suite of VOCs. All estimated concentrations must be reported.
- 2 EPA Methods yielding equivalent or lower method quantitation limits may also be used.

FIELD SAMPLING

In addition to the above sampling and analysis, field sampling and analysis shall be conducted when effluent samples are collected. The sampling and analysis of field parameters shall be as specified in Table 3.

Table 3: Field Sampling Requirements

Parameters	Units	Type of Sample
Specific electrical conductance	µmhos/cm	Grab
pH	pH Units (to 0.1 units)	Grab
Temperature	°C	Grab
Flow Rate	Gallons per Minute	Measurement

Field test instruments (such as those used to test pH) may be used provided that:

1. The operator is trained in proper use and maintenance of the instruments;
2. The instruments are calibrated prior to each monitoring event;
3. Instruments are serviced and/or calibrated by the manufacturer at the recommended frequency; and
4. Field calibration reports are appended to the required quarterly and annual monitoring reports.

DISCHARGE MONITORING

The Discharger shall continuously monitor the discharge of treated groundwater into site injection wells and/or infiltration galleries according to the requirements specified in Table 4.

Table 4: Discharge Monitoring Requirements

Parameters	Units	Type of Sample
Volume of Water Discharged	gallons per minute	Meter

REPORTING

When reporting the data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner as to illustrate clearly the compliance with this Order. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Program shall also be reported to the Central Valley Water Board.

As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, all reports shall be prepared by a registered professional or their subordinate and signed by the registered professional.

The Discharger shall submit quarterly electronic data reports; which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30. The first, second, and fourth quarter reports shall be submitted electronically over the internet to the

Geotracker database system by **15 February, 15 May, and 15 August**, respectively. The Annual shall be submitted in lieu of the third quarter report by **31 December**. These reports shall be submitted until such time as the Executive Officer determines that the reports are no longer necessary.

A letter transmitting the monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period, and actions taken or planned for correcting noted violations, such as operation or facility modifications. If the Discharger has previously submitted a report describing corrective actions and/or a time schedule for implementing the corrective actions, reference to the previous correspondence will be satisfactory. The transmittal letter shall contain the penalty of perjury statement by the Discharger, or the Discharger's authorized agent, as described in the Standard Provisions General Reporting Requirements Section B.3.

The Discharger shall implement the above monitoring program on the first day of the month following adoption of this Order.

Ordered by:


For PAMELA C. CREEDON, Executive Officer

1/6/15

(Date)

1/6/15 MLP