

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM R5-2011-XXXX

FOR
AEROJET-GENERAL CORPORATION
WHITE ROCK NORTH DUMP GROUNDWATER TREATMENT FACILITY
SACRAMENTO COUNTY

This Monitoring and Reporting Program (“MRP”) describes requirements for monitoring a groundwater extraction and treatment system. 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. Central Valley Water Board staff shall approve specific sample station locations prior to implementation of sampling activities.

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 grab sample shall be recorded on the sample chain of custody form.

TREATMENT SYSTEM MONITORING

The treatment system is required to be monitored to assure compliance with effluent limitations. Each treatment system shall be sampled as follows in Table 1, using the analytical methods found in Table 2:

**Table 1: SAMPLING FREQUENCY AND
CONSTITUENT SUITE FOR TREATMENT SYSTEM**

Monitor Point	Units	Frequency
Influent Monitoring		
Perchlorate	µg/L	Monthly
Volatile Organics	µg/L	Monthly
n-nitrosodimethylamine	µg/L	Quarterly
Effluent Monitoring		
Perchlorate	µg/L	Monthly
Volatile Organics	µg/L	Monthly
Total Dissolved Solids	mg/L	Monthly
n-nitrosodimethylamine	µg/L	Monthly ¹
Electrical Conductivity ²	µmhos/com	Monthly
pH	pH units	Monthly
Flow ³ - average	gallons per minute	Monthly
Flow ³ – cumulative	total gallons per month	Monthly

¹ To commence after n-nitrosodimethylamine is detected in the influent.

² Field measurements.

³ Meter

GROUNDWATER MONITORING

Groundwater monitoring in the project area is conducted pursuant to Cleanup and Abatement Order R5-96-150 and the 1989 Partial Consent Decree for the Aerojet Superfund Site. Additional groundwater monitoring is not required by this Order. The treatment system is discharging groundwater back to the groundwater at a quality that is equivalent or better than the existing groundwater quality as the perchlorate and volatile organics have been removed.

Table 2: ANALYTICAL METHODS

Constituent	Method ¹	Maximum Practical Quantitation Limit (µg/L) ²
Perchlorate	EPA 314.1	4.0
n-nitrosodimethylamine	EPA Method 521	0.002
Volatile Organics	EPA Method 8260	0.5
Total Dissolved Solids	EPA Method 160.1	10,000

¹ Or an equivalent EPA-approved Method that achieves the maximum Practical Quantitation Limit.

² All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported, and reported as an estimated value. If the approved method does not achieve the listed PQL, then a non-detect using the approved method is deemed to be in compliance with the limit.

FIELD SAMPLING

In addition to the above sampling and analysis, field sampling and analysis shall be conducted each influent and/or effluent sampling is conducted. The sampling and analysis of field parameters shall be as specified in Table 3.

Table 3: FIELD SAMPLING REQUIREMENTS

Parameters	Units	Type of Sample
Electrical Conductivity	µmhos	Grab
pH	pH units	Grab

Field test instruments (such as those used to test pH and dissolved oxygen) 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 submitted as described in the "Reporting" section of this MRP.

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. In addition, the Discharger shall notify the Central Valley Water Board within 48 hours of any unscheduled shutdown of a groundwater extraction system. 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 quarterly reports shall be submitted electronically over the internet to the Geotracker database system by the 1st day of the second month following the end of each calendar quarter by **1 February, 1 May, 1 August, and 1 November** until such time as the Executive Officer determines that the reports are no longer necessary.

Quarterly reports shall be submitted to the Central Valley Water Board by the **1st day of the second month following the end of each calendar quarter (i.e., by 1 February, 1 May, 1 August, and 1 November)**. Each quarterly report shall include the following minimum information:

- (a) a description and discussion of the sampling results, including trends in the concentrations of pollutants;
- (b) if compliance with effluent limitations is not achieved, causes of the exceedances and a description of the improvements to correct the problems;
- (c) a copy of the laboratory data reports (can be on CD);
- (d) if applicable, the status of any ongoing remediation, including cumulative information on the mass of pollutant removed from the subsurface, system operating time, the effectiveness of the remediation system, and any field notes pertaining to the operation and maintenance of the system;
- (e) the volume of water provided to Teichert on a monthly basis;
- (f) if applicable, the reasons for and duration of all interruptions in the operation of any remediation system, and actions planned or taken to correct and prevent interruptions; and

(g) A log of GAC/resin replacement, if applicable along with transportation date(s) and destination of disposal.

A letter transmitting the self-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.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

http://www.waterboards.ca.gov/public_notices/petitions/water_quality

or will be provided upon request.

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

Ordered by: _____
PAMELA C. CREEDON Executive Officer

(Date)