

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING ORDER NO. R5-2012-0825

CALIFORNIA WATER CODE SECTION 13267
FOR
UNION PACIFIC RAILROAD, FORMER TRACY MAINTENANCE YARD
SAN JOAQUIN COUNTY

This Order is issued to the Union Pacific Railroad Company (hereafter Discharger) pursuant to California Water Code section 13267, which authorizes the Executive Officer of the California Regional Water Quality Control Board, Central Valley Region (hereafter Central Valley Water Board) to issue a Monitoring and Reporting Order (Order).

The Executive Officer finds:

INTRODUCTION

1. The Union Pacific Railroad Company (hereafter Discharger) acquired Southern Pacific Railroad and its associated facilities, including the former Tracy Maintenance Facility. Union Pacific Railroad owns and operates the Tracy Maintenance Yard, although maintenance activities have not been conducted there since 1987.
2. The former Tracy Maintenance Yard is at 720 East 6th Street in Tracy (Site). Historical railroad maintenance activities have polluted soil and groundwater. Diesel fuel is detected as free product on top of the water table in the central portion of the property, and diesel fuel is present in the dissolved phase in groundwater, which occurs at about 13 feet below ground surface. This pollution has impaired the beneficial use of groundwater resources at the Site.
3. Between about 1989 and 2006, Union Pacific Railroad removed about 650 pounds of subsurface oil and free floating diesel fuel. In 1994, soil excavated from the former Toxic Pits Cleanup Act pond was prepared and spread into two bioremediation beds. Between 1993 and 2004, a groundwater extraction and treatment system operated, and between 2000 and 2002 was augmented with a dual phase extraction system, which removed diesel fuel and volatile organic compounds from groundwater.
4. This Monitoring and Reporting Order is issued by the Central Valley Water Board, pursuant to California Water Code (CWC) section 13267 and is necessary to delineate groundwater pollution and to determine whether remediation efforts are effective.
5. Existing data and information about the Site show the presence of various chemicals, including petroleum hydrocarbons emanating from the property under the control of the Discharger. The Discharger is responsible for the discharge because the Discharger owns the Site.

6. The Discharger shall not implement any changes to this Order unless and until a revised Order is issued by the Executive Officer. This Monitoring and Reporting Order replaces the requirements listed in Order No. R5-2002-0807, which was issued on 29 April 2002.
7. Prior to construction of any new groundwater monitoring or extraction wells, and prior to destruction of any groundwater monitoring or extraction wells, the Discharger shall submit plans and specifications to the Central Valley Water Board for review and approval. Once installed, all new monitoring wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule provided in the Monitoring Specifications section of this Order.

LEGAL PROVISIONS

8. CWC section 13267 states, in part:

(b)(1) In conducting an investigation, the Regional Board may require that any person who has discharged, discharges, or is suspected of having discharged or, discharging, or who proposes to discharge waste within its region . . . shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

The reports required herein are necessary for the reasons described in this Order, to assure protection of waters of the state, and to protect public health and the environment.

9. CWC section 13268 states, in part:

(a)(1) Any person failing or refusing to furnish technical or monitoring program reports as required by subdivision (b) of Section 13267 . . . or falsifying any information provided therein, is guilty of a misdemeanor and may be liable civilly in accordance with subdivision (b).

(b)(1) Civil liability may be administratively imposed by a regional board in accordance with Article 2.5 (commencing with Section 13323) of Chapter 5 for a violation of subdivision (a) in an amount which shall not exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Failure to submit the required reports to the Central Valley Water Board according to the schedule detailed herein may result in enforcement action(s) being taken against you, which may include the imposition of administrative civil liability pursuant to CWC section 13268. Administrative civil liability of up to \$1,000 per violation per day may be imposed for non-compliance with the directives contained herein.

REQUIRED ACTIONS

IT IS HEREBY ORDERED that Monitoring and Reporting Program No. R5-2002-0807 be rescinded and replaced with Monitoring and Reporting Order No. R5-2012-082. Pursuant to California Water Code section 13267, Union Pacific Railroad Company shall conduct monitoring and reporting in compliance with the following:

Monitoring Specifications

1. The Discharger shall implement monitoring according to the schedule shown in Table 1. There are 14 monitoring wells scheduled for semi-annual sampling, and 19 wells scheduled for annual sampling. These wells are shown in Figure 1. This Monitoring Order applies to these 33 wells and any monitoring wells installed subsequent to the issuance of this Order. The Discharger shall collect samples using standard Environmental Protection Agency (EPA) protocol.

Table 1. Monitoring Frequency

	Semi-annually²	Annually³
Wells¹	MW-02A, MW-09A, MW-10A, MW-22A, MW-23A, MW-24A, MW-25A, MW-26A, MW-27A, TW-02B, TW-03, MW-01C, MW-07A, MW-12B, and any new monitoring wells.	MW-01A, MW-01B, MW-05A, MW-06A, MW-08A, MW-10B, MW-11A, MW-11BR, MW-12A, MW-13A, MW-13B, MW-14A, MW-14B, MW-15A, MW-15B, MW-15C, TW-01, TW-02, and TW-04.

¹ All wells (except those noted otherwise) shall be monitored semi-annually for Depth to Water.

² Wells that must be sampled semi-annually shall be sampled during the first (January-March) and third (July-September) quarters.

³ Wells that must be sampled annually shall be sampled during the third quarter (July-Sept).

2. The Discharger shall analyze samples according to standard Environmental Protection Agency (EPA) protocol using the methods shown in Table 2.

Table 2. Analytical Methods

Constituents	Analytical Method	Maximum Practical Quantitation Limit⁴
Depth to Groundwater	---	---
pH, temperature, electrical conductivity	Field Meter	Varies
Total Petroleum Hydrocarbons as diesel	EPA Method 8015	50 ug/L

⁴ If the maximum practical quantitation limit is exceeded for a non-detectable result, the Discharger shall provide an explanation in the report text. All concentrations between the Method Detection Limit and the Practical Quantitation Limit shall be reported as estimated.

3. Monitoring wells with free product or a visible sheen (if applicable) shall be monitored at a minimum for product thickness and depth to water.

Reporting Specifications


4. When reporting data, the Discharger shall arrange the information in tabular form so that the date, the constituents, and the concentrations are readily discernible and shall summarize the data in such a manner as to illustrate clearly the compliance with this Order.
5. 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 shall be signed by the registered professional.
6. The Discharger shall submit electronic data reports semi-annually, which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30. The semi-annual data reports shall be submitted electronically over the internet to the Geotracker database system **by 1 May and 1 November**, or as otherwise specified by Central Valley Water Board staff, until such time as the Executive Officer determines that the reports are no longer necessary. The semi-annual data reports should include the following information:
 - (a) Tabulated sample locations, analyses, and results.
 - (b) A figure showing sample locations and groundwater gradient(s).
7. **Annual** electronic reports (summarizing first and third quarter data for a given calendar year), which conform to the requirements of the California Code of Regulations, Title 23, Division 3, Chapter 30, shall be submitted electronically over the internet to the State Water Resources Control Board Geotracker database system by **1 November**, or as otherwise specified by Central Valley Water Board staff, until such time as the Executive Officer determines that the reports are no longer necessary. The Annual electronic report may substitute for the corresponding semi-annual electronic data report.
8. **Annual** paper copy reports shall be submitted to this Central Valley Water Board office by **1 November**, or as otherwise specified by Central Valley Water Board staff, until such time as the Executive Officer determines that the reports are no longer necessary. Each report shall include the following minimum information:
 - (a) A description and discussion of the groundwater sampling event and results, including trends in the concentrations of pollutants and groundwater elevations in the wells, how and when samples were collected, and whether the pollutant plume(s) is delineated.
 - (b) Field logs that contain, at a minimum, water quality parameters measured before, during, and after purging, method of purging, depth of water, volume of water purged, etc.

- (c) Groundwater contour maps and pollutant concentration maps containing relevant data obtained during the previous year.
 - (d) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
 - (e) A table showing well construction details such as well number, groundwater zone being monitored, coordinates (longitude and latitude), ground surface elevation, reference elevation, elevation of screen, elevation of bentonite, elevation of filter pack, and elevation of well bottom, if available.
 - (f) A table showing historical lateral and vertical (if applicable) flow directions and gradients.
 - (g) Cumulative data tables for all major constituents of concern containing the water quality analytical results and depth to groundwater for all monitoring wells. The past five years must be tabulated, preceeding data may be submitted on electronic media and included in the report. The Central Valley Water Board may request additional data as necessary.
 - (h) A copy of the laboratory analytical data reports for all monitoring events that occurred over the year, which may be provided on electronic media and included in the report.
 - (i) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
 - (j) If applicable, the status of any on-going 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.
 - (k) 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.
 - (l) If applicable, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.
9. The results of any monitoring done more frequently than required at the locations specified in the Monitoring and Reporting Order also shall be reported to the Central Valley Water Board.
10. The Discharger shall implement the above monitoring program as of the effective date of the Order.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Resources Control Board to review the action in accordance with CWC section 13320 and California Code of Regulations, Title 23, Sections 2050 and following. The State Water Resources Control 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 holiday, 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.

This Order is effective upon the date of signature.

Ordered by:



PAMELA C. CREEDON, Executive Officer

12/19/2012

(Date)

