

California Regional Water Quality Control Board  
North Coast Region

Monitoring and Reporting Program  
Order No R1-2018-0028  
(Rescinds and Replaces Monitoring and Reporting Program No. R1-2011-0087)

for

Union Pacific Railroad Company

99 Frances Street  
Santa Rosa, California

Case No. 1NSR078  
WDID 1B930002NSON

Sonoma County

This Monitoring and Reporting Program Order is issued pursuant to California Water Code Section 13267 (b) and requires monitoring of the groundwater extraction and treatment system influent, effluent, and receiving water and submission of technical reports. The objective of monitoring conducted under this monitoring program is to demonstrate compliance with Waste Discharge Requirements for *Discharges of Highly Treated Groundwater to Surface Waters following Extraction and Treatment of Groundwater Polluted with Petroleum Hydrocarbons and Volatile Organic Compounds*, Order No. R1-2016-0034 (General National Pollution Discharge Elimination System No. CAG911001). The burden, including costs, of these reports bears a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.

This Monitoring and Reporting Program rescinds and replaces Monitoring and Reporting Program No. R1-2011-0087.

The failure to furnish any of the required reports, or the submittal of substantially incomplete reports or false information, is a misdemeanor, and may result in additional enforcement actions being taken against the Discharger, including issuance of an Administrative Civil Liability (ACL) Complaint pursuant to Water Code section 13268. Liability may be imposed pursuant to Water Code section 13268 in an amount not to exceed one thousand dollars (\$1,000) for each day in which the violation occurs.

Under the authority of California Water Code section 13267, the Discharger named above is required to comply with the following:

## MONITORING

1. All laboratory analyses shall be performed at a California certified laboratory. Analytical methods for sample analyses shall achieve practical quantitation limits that are adequate for evaluating regulatory action levels for each constituent.

### Monitoring Stations

2. Treatment System Influent-M-INF – Untreated groundwater at a point in the groundwater collection system immediately prior to treatment.
3. Discharge Point 001 – M-001 - Treated effluent after treatment and before contact with the receiving water and/or dilution by any other water or waste.
4. Receiving Water 001 – R-001 – Receiving water at an appropriate monitoring location upstream of the point of discharge that adequately represents upstream water quality.
5. Receiving Water 002 – R-002 – Receiving water at an appropriate monitoring location downstream of the point of discharge that adequately represents downstream water quality.

### Influent Monitoring

6. The Discharger shall monitor untreated groundwater/influent to the treatment facility at monitoring location M-INF in accordance with the following schedule:

Parameter	Frequency
Flow	Continuous
Temperature	Monthly
pH	Monthly
Dissolved Oxygen	Semiannually
Full Scan Volatile Organic Compounds by 8260B	Monthly
Total petroleum hydrocarbons as gasoline	Monthly
Total petroleum hydrocarbons as diesel	Monthly

### Effluent Monitoring

7. The Discharger shall monitor treated effluent at monitoring location M-001 in accordance to the following schedule:

<b>Parameter</b>	<b>Frequency</b>
Flow	Continuous
Temperature	Monthly
pH	Monthly
Dissolved Oxygen	Semiannually
Full Scan Volatile Organic Compounds by 8260B	Monthly
Total Petroleum Hydrocarbons as Gasoline	Monthly
Total Petroleum Hydrocarbons as Diesel	Monthly
Acute Toxicity	Annually
Chronic Toxicity	Annually

### Receiving Water Monitoring

- Receiving water sampling shall be performed when water is present with a flow rate of at least 0.1 cubic feet per second. Monthly inspections of the receiving water shall be conducted to verify the presence or absence of water.
- When receiving water is determined to have an appropriate flow rate for the collection of representative samples, the Discharger shall monitor receiving water at R-001 and R-002 according to the following schedule:

<b>Parameter</b>	<b>Frequency</b>
Flow	Monthly
Temperature	Monthly
pH	Monthly
Dissolved Oxygen	Semiannually
Turbidity	Monthly

### REPORTING

- Semiannual monitoring reports shall be submitted to the Regional Water Board in accordance with the following schedule:

<b>Sampling Period</b>	<b>Due Date</b>
1st and 2nd Quarter (January - June)	August 1
3rd and 4th Quarter (July, - December)	February 1

- Monitoring data and reports shall be submitted to the Regional Water Board via the State Water Resources Control Board's Geographic Environmental Information

Management System database (GeoTracker) as specified in Title 23, Division 3, Chapter 30, Article 2, Sections 3890-3895 of the California Code of Regulations.

3. Monitoring reports shall be prepared by or under the supervision of a California Professional Civil Engineer or Geologist.
4. Each monitoring report shall include the following elements:
  - a. A narrative description of the work conducted
  - b. A narrative of remediation system operation, maintenance, performance, estimates of contaminant mass removed, and an evaluation of system performance
  - c. Field notes and/or sampling logs documenting such activities as well purging, aquifer parameter testing, well recharge prior to sampling
  - d. Chain-of-custody documentation
  - e. Laboratory reports, including QA/QC data
  - f. An accurately scaled site plan showing all sampling points in relation to significant site features
  - g. Data tables summarizing all current and historical analytical data for the site constituents of concern for each sampling station

Ordered by \_\_\_\_\_

Matthias St. John  
Executive Officer

April 12, 2018