

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

MONITORING AND REPORTING PROGRAM NO. R5-2008-0818
CALIFORNIA WATER CODE SECTION 13267
FOR
UNION PACIFIC RAILROAD

BARBER CASHEW SUPPLY CORPORATION LEASE PROPERTY, MAXWELL
COLUSA COUNTY

The Barber Cashew Supply Corporation dba B & R Company of Willows operated a retail fertilizer facility at 113 Old Highway 99 in Maxwell from 1958 through the early 1990s on property leased from and owned by the Union Pacific Railroad Company (Discharger). Soil contains elevated concentrations of nitrate and ammonium, groundwater contains elevated concentrations of nitrate and occurs between about five and ten feet below ground surface. This pollution impaired the beneficial use of this water resource. In 2000, Union Pacific Railroad Company planted about 1,300 eucalyptus trees on the site to treat soil and groundwater.

This Monitoring and Reporting Program (MRP) is issued pursuant to Section 13267 of the California Water Code and is necessary to delineate groundwater pollutant plumes and determine whether remediation efforts are effective. Existing data and information about the site show the presence of various chemicals, including nitrate and ammonium, emanating from the property under the control of the Discharger. The Discharger shall not implement any changes to this MRP unless and until a revised MRP is issued by the Executive Officer. This MRP replaces the requirements listed in MRP No. R5-2002-0839, which was issued on 31 December 2002.

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 Board for review and approval. Once installed, all new wells shall be added to the monitoring program and shall be sampled and analyzed according to the schedule below.

GROUNDWATER MONITORING

As shown on Figure 1, there are 10 monitoring wells in the shallow aquifer (MW-1, MW-2, MW-3, MW-5, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12), and one monitoring well in the intermediate aquifer (DMW-4). The groundwater monitoring program for the 11 monitoring wells and any wells installed subsequent to the issuance of this MRP, shall follow the schedule below. Sample collection and analysis shall follow standard EPA protocol.

GROUNDWATER MONITORING PROGRAM

Constituents	Method	Maximum Detection Limit ¹	Monitored Wells	Frequency
Depth to Groundwater	---	0.01 ft	MW-1, MW-2, MW-3, MW-5, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, and DMW-4	Annually ²
Total Oxidizable Nitrogen	EPA 353.2	1 mg/l	MW-1, MW-3, MW-5, MW-10, and MW-11	Annually ²

¹ For non-detectable results.

² In the first quarter (January-March)

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 Board within 48 hours of any unscheduled shutdown of any soil vapor and/or groundwater extraction system.

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.

Annual electronic reports, 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 Board Geotracker database system by the **1st day of the second month following the end of the second calendar quarter (i.e., by 1 August)**, until such time as the Executive Officer determines that the reports are no longer necessary.

Annual paper copy reports shall be submitted to the Regional Water Board by the **1st day of the second month following the end of second calendar quarter (i.e., by 1 August)** until such time as the Executive Officer determines that the reports are no longer necessary. Each annual report shall include the following minimum information:

- (a) Both tabular and graphical summaries of all data obtained during the year.
- (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) 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.
- (d) A copy of the laboratory analytical data report.
- (e) Cumulative data tables containing the water quality analytical results and depth to groundwater.
- (f) Groundwater contour maps and pollutant concentration maps containing all data obtained during the previous year.
- (g) A discussion of the long-term trends in the concentrations of the pollutants in the groundwater monitoring wells.
- (h) A description of all remedial activities conducted during the year, an analysis of their effectiveness in removing the pollutants, and plans to improve remediation system effectiveness.
- (i) An identification of any data gaps and potential deficiencies/redundancies in the monitoring system or reporting program.
- (j) If desired, a proposal and rationale for any revisions to the groundwater sampling plan frequency and/or list of analytes.

The results of any monitoring done more frequently than required at the locations specified in the MRP also shall be reported to the Regional Water Board. The Discharger shall implement the above monitoring program as of the date of the Order.

Ordered by:

PAMELA C. CREEDON, Executive Officer

5 September 2008

(Date)

