

California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM
ORDER NO. R1-2010-0007
January 25, 2010

FOR IN-SITU GROUNDWATER TREATMENT

PAGE PROPERTY
3920 CANYON ROAD
WILLITS, CALIFORNIA

Mendocino County

The groundwater monitoring program consists of sampling a total of 19 wells identified as performance wells PPP-01, PPP-03R, PPP-05, PPMW-1, PPMW-2R, PPMW-17, PPMW-20, PPMW-22, PPMW-26, PPMW-27, PPMW-28, PPMW-29, PPMW-30, PPMW-33, PPMW-36, PPMW-37, PPLF-9, PPLF-10, PPLF-11, and contingency wells PPMW-24, PPMW-25, PPMW-31, PPMW-32, and PPMW-38.

The performance wells are located within the injection areas and downgradient of the injection areas, and the contingency monitoring wells are located at the toe of the former landfill and between the injection areas and Darby Creek. The wells and injection areas are depicted on Figures 2 and 3.

All groundwater monitoring wells shall be sampled for the constituents shown on Table 1, attached to this Monitoring and Reporting Program.

The depth to groundwater shall be determined to at least 0.01 foot increments in all groundwater monitoring wells prior to injection, during the injection, and during all sampling events.

All laboratory analyses must be performed by a laboratory certified for those analyses by the State of California Department of Health Services. Analytical methods for sample analyses shall achieve practical quantification reporting limits that are adequate for evaluating regulatory action levels for each constituent.

Contingency Plan and Actions

The injection of reducing agents may result in temporary increases of sulfate, and temporarily mobilize naturally-occurring arsenic, antimony, and manganese. Groundwater monitoring of contingency plan wells is required on a monthly schedule for three consecutive months, and quarterly thereafter. There is an existing groundwater extraction system at the toe of the landfill where groundwater is captured and treated at the top of the landfill to below detectable levels of hexavalent chromium. The contingency plan would consist of adding existing groundwater monitoring wells to the existing extraction system, and could include, but is not limited to, monitoring wells PPMW-24, PPMW-25, PPMW-31, PPMW-32, and PPMW-38.

The discharger shall provide verbal notification within 48 hours, and submit a letter notifying the Executive Officer of any increasing trends and/or exceedences with water quality objectives within 5 working days of the receipt of the results from the laboratory.

If warranted, additional groundwater extraction will be conducted at the contingent monitoring wells, the extraction trench, or other existing wells as directed by the Executive Officer. The discharger shall install additional extraction wells on the Site as directed by the Executive Officer to control off-site migration.

Darby Creek Sampling

Baseline sampling of the constituents identified on Table 1 shall be conducted prior to injection activities, and monthly thereafter at surface water locations SW-1, SW-2, SW-3, SW-5, SW-6R.

Spring Sampling

All springs identified shall be evaluated prior to the injection and weekly thereafter. The condition of each spring shall be reported (dry, damp, wet, etc.). If sufficient water is available, the spring shall be sampled for the constituents listed on Table 1, but no more than once a month.

REPORTING

The depth to groundwater shall be determined to at least 0.01 foot increments in all wells identified above prior to injection, during the injection, and during all sampling events.

The results of the all sampling events shall be submitted within 45 days following the sampling event. The monitoring report shall summarize all monitoring data collected for the in-situ treatment, and include signed laboratory reports and field logs with instrument calibration records and measurements.

Verbal reporting to Regional Water Board staff shall be provided within 48 hours of receipt of sampling data that triggers the Contingency Actions.

Monitoring data and reports shall also be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker) as required by Title 23, Division 3, Chapter 30, Article 2, Sections 3890-3895 of the California Code of Regulations).

Ordered by _____
Catherine Kuhlman
Executive Officer

January 25, 2010