

California Regional Water Quality Control Board  
North Coast Region

Monitoring and Reporting Program No. R1-2012-0098  
(Replaces Monitoring and Reporting Program No. R1-2009-0062)

For  
Quik Stop Market #35  
816 McMinn Avenue  
Santa Rosa, California

Sonoma County

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code Section 13267(b) to the responsible parties and requires monitoring and reporting for activities associated with the implementation of remedial activities under General Waste Discharge Requirements Order No. R1-2006-0107 (Order 0107). The objectives of monitoring conducted under this MRP are to provide the Discharger and Regional Water Board staff with information concerning contaminant trends in groundwater and to demonstrate compliance with the provisions of Order 0107. Groundwater monitoring requirements specified below are summarized in Appendix 1 of this MRP.

Under the authority of the California Water Code Section 13267(b), the Discharger named above is required to comply with the following:

**GROUNDWATER MONITORING**

1. Prior to purging, each monitoring well to be sampled shall be checked for the presence or absence of free product. The thickness of the product shall be measured to the nearest 0.01 foot.
2. Prior to purging, the depth to groundwater shall be determined to at least 0.01 foot increments in all groundwater monitoring wells semiannually during the first and third quarter groundwater monitoring events. The data generated from the elevation readings must be referenced to the same elevation datum used for the electronic GeoTracker survey values.
3. Groundwater in monitoring wells MW-1 through MW-9 and MW-1B through MW-5B shall be monitored semiannually, during first and third quarters, for dissolved oxygen (DO), oxidation-reduction potential (ORP), temperature, conductivity, and pH.
4. Groundwater samples from groundwater monitoring wells MW1 through MW-9 and MW-1B through MW-5B shall be collected and analyzed semiannually, during first and third quarters, for the following constituents:

- a. Total Petroleum Hydrocarbons measured as gasoline;
- b. Benzene, toluene, ethyl benzene, and xylenes;
- c. Fuel oxygenates: methyl tert-butyl ether and tert-butyl alcohol.

EPA method 8260 shall be used for analysis of the fuel oxygenates.

5. Groundwater samples from monitoring wells MW-1, MW-5 and MW-7 will be used to monitor the ozone remediation system. Groundwater samples shall be collected semiannually, during first and third quarters, for analysis of the following parameters:

- a. Bromide and bromate; and
- b. Dissolved hexavalent chromium.

The laboratory reporting limit for hexavalent chromium should be no higher than 5 µg/L and the laboratory reporting limit for bromate should be no higher than 1 µg/L.

6. A groundwater sample shall be collected from monitoring well MW-8 during third quarter of each year and analyzed for the following parameters:

- a. Bromide and bromate; and
- b. Dissolved hexavalent chromium.

The laboratory reporting limit for hexavalent chromium should be no higher than 5 µg/L and the laboratory reporting limit for bromate should be no higher than 1 µg/L.

7. All laboratory analyses shall be performed at a laboratory certified by the California Department of Health Services.

8. Analytical methods for sample analyses shall achieve minimum detection levels that are adequate for evaluating regulatory action levels for each constituent.

## **REPORTING**

1. Semi-annual monitoring reports shall be submitted to this office in accordance with the following schedule:

<b><u>Reporting Period</u></b>	<b><u>Due Date</u></b>
January, February, March	May 1
July, August, September	November 1

2. A groundwater elevation contour map shall be included for each set of measurements and shall include the following:
  - a. location of the facilities;
  - b. location of the monitoring wells;
  - c. location of the former underground tanks; and
  - d. groundwater flow pattern including the direction of the groundwater gradient.
3. A contamination isogram map shall be included for each significant pollutant detected during the monitoring events and shall include the following:
  - a. location of the facilities;
  - b. location of the monitoring wells; and
  - c. location of the former underground tanks.
4. Current and previous analytical results shall be reported in tables which include the following:
  - a. sampling point;
  - b. date of sample collection;
  - c. constituents and analytical results; and
  - d. quantification limits employed for non-detect analytical results.
5. All current and previous remedial system operation and maintenance activities shall be reported in the monitoring reports.
6. Each monitoring report shall contain copies of the well purging and sampling field logs; chain of custody (COC) documents showing the time and date of collection and person collecting; and signed laboratory sheets including quality control data and explanations of analytical anomalies, if any. These supporting documents may be included as appendices to the report. Filtration and preservation of groundwater samples for dissolved metals analysis shall be described on either the COC, sampling field log, or in the body of each monitoring report.
7. The concentration of Oxidation Reduction Potential (ORP) and pH sensitive constituents, as listed in Groundwater Monitoring, items 5 and 6 above, shall be discussed in each groundwater monitoring report. If during operation of the ozone treatment system, ORP and pH sensitive constituents become elevated, Regional Water Board staff shall be notified by phone or fax within one week. Additional appropriate actions to monitor, minimize or decrease the mobilization of elevated constituents may be required.
8. Monitoring of ozone and volatile organic compounds in air shall be performed in order to safeguard against leaks during system operation. Any leaks detected in the system shall be reported to Regional Water Board staff immediately, along with a

plan to abate and repair the leak. Results of air monitoring shall be reported in semi-annual monitoring reports.

9. The monitoring reports and monitoring data shall be submitted electronically to the State Water Resources Control Board's GeoTracker database as required by Title 23, Division 3, Chapter 30 of the California Code of Regulations.

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

Matthias St. John  
Executive Officer

September 4, 2012

Appendix 1

Well ID	1 <sup>st</sup> Quarter	3 <sup>rd</sup> Quarter
MW-1, MW-5, MW-7*	TPH-g, BTEX, MTBE, TBA, Br <sup>-</sup> , BrO <sup>3-</sup> , Cr <sup>6+</sup>	TPH-g, BTEX, MTBE, TBA, Br <sup>-</sup> , BrO <sup>3-</sup> , Cr <sup>6+</sup>
MW-2, MW-3, MW-4, MW-6, MW-8, MW-9*	TPH-g, BTEX, MTBE, TBA	TPH-g, BTEX, MTBE, TBA
MW-8*	TPH-g, BTEX, MTBE, TBA	TPH-g, BTEX, MTBE, TBA, Br <sup>-</sup> , BrO <sup>3-</sup> , Cr <sup>6+</sup>
MW-1B, MW-2B, MW-3B, MW-4B, MW-5B*	TPH-g, BTEX, MTBE, TBA	TPH-g, BTEX, MTBE, TBA

\*-All monitoring wells shall be monitored for dissolved oxygen (DO), oxidation-reduction potential (ORP), temperature, conductivity, and pH during first and third quarters of each year.