California Regional Water Quality Control Board
North Coast Region

Monitoring and Reporting Program No. R1-2013-0075
(Replaces and Rescinds Monitoring and Reporting Program No. R1-2012-0098)

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

Case No. 1TSR275

Sonoma County

This Monitoring and Reporting Program (MRP) is issued pursuant to California Water Code Section 13267(b) to the Discharger 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:

**BASELINE MONITORING**

1. Prior to startup of the "B" zone ozone remediation system, groundwater from MW-1B, MW-3B and MW-5B shall be analyzed for bromate and dissolved hexavalent chromium, dissolved oxygen (DO), oxidation-reduction potential (ORP), temperature, conductivity, and pH. 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.

## 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 semi-annually 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 semi-annually, during first and third quarters, for DO, ORP, temperature, conductivity, and pH.

4. Groundwater samples from groundwater monitoring wells MW-1 through MW-9 and MW-1B through MW-5B shall be collected and analyzed semi-annually, during first and third quarters, for the following constituents:

   a. Total Petroleum Hydrocarbons measured as gasoline (TPH-g);
   b. Benzene, toluene, ethyl benzene, and xylenes (BTEX);
   c. Fuel oxygenates: methyl tert-butyl ether (MTBE) and tert-butyl alcohol (TBA).

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

5. Groundwater samples from "A" zone monitoring wells MW-1, MW-8 and Exxon/Mobil (Triple S Tires) monitoring well MW-8B shall be analyzed for bromate semi-annually, during first and third quarters. The laboratory reporting limit for bromate should be no higher than 1 µg/L.

6. Groundwater samples shall be collected semi-annually from "B" zone monitoring wells MW-1B, MW-3B, and MW-5B and analyzed for bromate and 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:

| **Reporting Period** | **Due Date** |
|---|---|
| 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 isoconcentration 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, including metals analyses, 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 bromate and dissolved hexavalent chromium, 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

November 12, 2013

Appendix 1

| Well ID | Prior to Start-up of B Zone Remediation |
|---|---|
| MW-1B, MW-3B, MW-5B* | $BrO^{3-}$, $Cr^{6+**}$ |

| Well ID | 1st Quarter | 3nd Quarter |
|---|---|---|
| MW-1, MW-8* | TPH-g, BTEX, MTBE, TBA, $BrO^{3-}$ | TPH-g, BTEX, MTBE, TBA, $BrO^{3-}$ |
| MW-2, MW-3, MW-4, MW-5, MW-6, MW-7, MW-9* | TPH-g, BTEX, MTBE, TBA | TPH-g, BTEX, MTBE, TBA |
| MW-1B, MW-3B, MW-5B* | TPH-g, BTEX, MTBE, TBA, $BrO^{3-}$, $Cr^{6+**}$ | TPH-g, BTEX, MTBE, TBA, $BrO^{3-}$, $Cr^{6+**}$ |
| MW-2B, MW-4B* | TPH-g, BTEX, MTBE, TBA | TPH-g, BTEX, MTBE, TBA |
| Exxon/Mobil's MW8B | $BrO^{3-}$ | $BrO^{3-}$ |

*-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.

**Dissolved hexavalent chromium