California Regional Water Quality Control Board
North Coast Region

MONITORING AND REPORTING PROGRAM NO. R1-2009-0086
[Rescinding and Replacing Monitoring and Reporting Program No. R1-2007-0089]

WDID No. 1B002090NMEN

FOR

USA GASOLINE CORPORATION

1301 State Street
Ukiah, California
Mendocino County

This Monitoring and Reporting Program Order (Order) is issued pursuant to California Water Code Section (CWC) 13267(b) and requires monitoring of groundwater and submission of technical reports. This Order replaces all previously issued groundwater monitoring directives issued for the site. The objective of monitoring conducted under this Order is to provide the Discharger and the Regional Water Board with information concerning groundwater quality and contaminant trends at the site.

All monitoring and reporting activities shall be conducted by or under the supervision of a California Registered Engineer or Geologist. Under the authority of CWC section 13267, 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 in all monitoring wells shall be determined to nearest 0.01 foot at least semi-annually during the first and third quarter groundwater monitoring events. The groundwater elevations for each monitoring event shall be reported in tabular form indicating the top of casing elevation, the groundwater elevation referenced to mean sea level and the actual depth to groundwater.

3. Prior to purging for sampling, the observation monitoring wells MW-4, MW-10, MW-11, MW-12, MW-14, MW-23, MW-24, MW-25, EX-3, and EX-5 shall be tested for the process control parameters: Oxidation-Reduction Potential, pH, Temperature, Specific Conductivity and Dissolved Oxygen. The protocols for the field-tested parameters must ensure that the water quality data has not been altered by exposure of groundwater samples to atmosphere. Field instrument calibration records must be presented with the field data.

4. Groundwater samples from the observation monitoring wells MW-4, MW-10, MW-11, MW-12, MW-14, MW-16, MW-17, MW-18, MW-23, MW-24, and EX-5 shall be analyzed quarterly for the following potentially mobilized constituents of concern:

   a. Bromate;
   b. Dissolved metals: total chromium, hexavalent chromium, lead, molybdenum, selenium, vanadium, and uranium.
   c. Total Petroleum Hydrocarbons measured as gasoline and as diesel;
   d. Benzene, toluene, ethyl benzene, and xylenes;
   e. Fuel oxygenates: methyl tert-butyl ether, tert-amyl methyl ether, and tert-butyl alcohol.

5. Groundwater samples from monitoring wells MW-5, MW-7, MW-9, MW-15, MW-19, MW-20, MW-21, and MW-22 shall be analyzed semi-annually, during the first and third calendar quarters, for the following constituents of concern:

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

6. Chemical analyses must be performed by a laboratory certified by the State of California Department of Health Services.

7. Analytical methods for sample analyses shall achieve minimum detection levels that are adequate for evaluating regulatory action levels for each constituent. A table of commonly achievable practical quantitation limits for the constituents of concern is incorporated in this Monitoring and Reporting Program Order as Appendix A.

REPORTING

8. Semi-annual monitoring reports shall be submitted to the North Coast Regional Water Quality Control Board at 5550 Skylane Boulevard, Suite A, Santa Rosa, California, 95403 according to the following schedule:

Report	Reporting Period	Required Submittal Date
1st Semi-annual Report	January through June	July 31
2nd Semi-annual Report	July through December	January 31

9. Groundwater monitoring reports shall include the following elements:

   a. A narrative description of the work conducted;
   b. A groundwater elevation map for each sampling event;
   c. A contaminant distribution map showing isograms for constituents of concern detected in groundwater during the monitoring event;
   d. Analytical data tables including both current and historical analytical results;
   e. Copies of the well purging and sampling field logs; chain of custody documents; and signed laboratory reports including quality control data and explanations of

analytical anomalies, if any. These supporting documents may be included as appendices to the report

10. Laboratory data, copies of monitoring reports, and depth to groundwater measurements shall also be submitted electronically to the State Water Resources Control Board's Geographic Environmental Information Management System database (GeoTracker).[1]

Original signed by

Ordered by_____

Catherine Kuhlman
Executive Officer

August 3, 2009

[1] Information on GeoTracker submittal requirements can be found at http://www.waterboards.ca.gov/ust/electronic_submittal/index.shtml

Appendix A
Water Quality Objectives
For
Selected Petroleum Constituents in Groundwater

Constituent of Concern	Practical Quantitation Limit [1] (µg/l)	Water Quality Objective [2] (µg/l)	Reference for Objective
Methyl t-Butyl Ether	< 0.5	5	California Department of Health Services Secondary Maximum Contaminant Level applied to the TASTE and ODOR water quality objective in the Basin Plan
Gasoline	< 50	5.0	Published literature provides a taste and odor threshold of 5 ug/l which is applied to the narrative TASTE AND ODOR water quality objective of the Basin Plan
Diesel	< 50	100	US EPA health advisory of September 4, 1992, Suggested No Adverse Response Level (SNARL) applied to TASTE AND ODOR water quality objective in the Basin Plan
Motor Oil	< 175	100	US EPA health advisory Suggested No Adverse Response Level (SNARL) of 0.1 ug/l to 1.0 ug/l applied to GENERAL water quality objective in the Basin Plan
Benzene	< 0.5	0.15	California Public Health Goal (PHG) in Drinking Water (Office of Environmental Health Hazard Assessment) applied to GENERAL water quality objective in the Basin Plan
Toluene	< 0.5	42	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan
Ethylbenzene	< 0.5	3.2	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Xylenes	< 0.5	17	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan

[1] Practical quantitation limits are based on current technology. When analytical technology cannot achieve laboratory reporting levels as low as the water quality objective, the practical quantitation limit may be used.

[2] The California Water Code, and regulations and policies developed thereunder require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup and abatement activities are to provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored. Alternative cleanup levels greater than background concentration shall be permitted only if the discharger demonstrates that: it is not feasible to attain background levels; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and they will not result in water quality less than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Board (State Water Resources Control Board Resolutions Nos. 68-16 and 92-49).

Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The Basin Plan provides that "whenever several different objectives exist for the same water quality parameter, the strictest objective applies". Accordingly, the most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to protective water quality criteria levels. The table above sets out the water quality objectives for waters of the State impacted by discharges from the identified constituents of concern: