



Los Angeles Regional Water Quality Control Board

February 17, 2017

Mr. Rex Abacan Circle K Stores Incorporated 255 East Rincon, Suite 100 Corona, CA 92879

GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT PETROLEUM HYDROCARBON FUEL, VOLTATILE ORGANIC COMPOUNDS AND/OR HEXAVALENT CHROMIUM IMPACTED SITES

CIRCLE K STORE NO. 2211106 (FORMER MOBIL STATION NO. 18-LR4) 501 NORTH LAS POSAS ROAD, CAMARILLO CASE NO. C-89143; GLOBAL ID T0611100544; PRIORITY D-1 ORDER NO. R4-2014-0187; CI NO. 10299; SERIES NO. 092

Dear Mr. Abacan:

The California Regional Water Quality Control Board, Los Angeles Region (Los Angeles Regional Board) is the public agency with primary responsibility for the protection of groundwater and surface water quality for all beneficial uses within major portions of Los Angeles and Ventura Counties. As such, the Los Angeles Regional Board is the lead regulatory agency for overseeing corrective action (assessment and/or monitoring activities) and cleanup of releases from leaking underground storage tank systems at the subject site.

We are in receipt of your application for coverage under the General Waste Discharge Requirements (WDR) utilizing ozone sparging for groundwater remediation.

The site is Circle K Store No. 2211106, (hereinafter Discharger), fuel dispensing facility (former Mobil Station No. 18-LR4). The site is located on the northwest corner of North Las Posas Road and West Daily Drive at 501 North Las Posas Road in the City of Camarillo, California. The site is located in a mixed residential and commercial area. Site features include a service station building, four 10,000-gallon gasoline underground storage tanks, three fuel dispensers, and associated piping.

In June 2016, the depth to groundwater was approximately 21 feet below ground surface (bgs) with groundwater flowing radial toward MW-3 and to the southwest at a gradient of 0.005 foot/foot. Maximum reported groundwater concentrations were 7,300 microgram per liter (μ g/L) total petroleum hydrocarbons as gasoline (TPH_G), 1.4 μ g/L benzene, 1,300 μ g/L methyl tertiary butyl ether (MTBE), and 150,000 μ g/L tertiary butyl alcohol (TBA).

On behalf of the Discharger, Blaes Environmental Management (BEM) submitted the Work Plan for Groundwater Ozone Sparge Remedial Feasibility Testing (RAP) dated August 3, 2015. The RAP proposed to install two sparge wells to approximately 35 feet bgs, screened between 32

IRMA MUÑOZ, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

and 35 feet bgs (depth to groundwater is approximately 21 feet bgs) and to conduct an ozone sparge pilot test. The pilot test consisted of sparging each well for twenty minutes, alternating between the two wells for three weeks (24 hours per day). Wells MW-02, MW-10, and MW-15 will be utilized as observation wells. The RAP was approved by the Los Angeles Regional Board on October 1, 2016.

We have completed our review of your application and determined that the proposed discharge meets the conditions specified in Order No. R4-2014-0187, "Revised General Waste Discharge Requirements for Groundwater Remediation At Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Sites (General WDRs)," adopted by the Los Angeles Regional Water Quality Control Board on September 11, 2014.

Ozone is permitted as an oxidation/aerobic degradation enhancement compound in the General WDRs, Order No. R4-2014-0187. To avoid material surfacing, you can go to http://www.waterboards.ca.gov/losangeles/water-issues/programs/ust/guidelines/Subsurface-in-iection-of-ISRR.pdf for guidance.

Enclosed is Monitoring and Reporting Program No. CI-10299 (MRP) which allows the use of ozone for in-situ groundwater remediation at the site. This MRP and the General WDRs constitute the WDRs for the proposed feasibility study and full-scale implementation, if necessary.

Please include a reference to MRP No. CI-10299 when submitting technical monitoring reports to the Los Angeles Regional Board. This will assure that the reports are directed to the appropriate file and staff. Do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

In accordance with regulations adopted by the State Water Resources Control Board regarding electronic submittal of information, Underground Storage Tank Program (UST) monitoring reports have been electronically submitted to the State Board GeoTracker system under the UST Global ID T0611100544. To comply with the MRP under the WDR, you shall upload the WDR monitoring reports to the State Database GeoTracker under the two Global ID T0611100544 and WDR100039556. For more information regarding the new Global ID for WDR, please see the ESI training video available at:

https://waterboards.webex.com/waterboards/ldr.php?AT=pb&SP=MC&rID=44145287&rKey=7dad4352c990334b

For all parties who upload electronic documents to the State GeoTracker Database, the Los Angeles Regional Board will no longer accept documents (submitted by either hard copy or email) that already have been uploaded to GeoTracker. Please see Electronic Submittal to the Los Angeles Regional Board for GeoTracker Users at:

http://www.waterboards.ca.gov/losangeles/resources/Paperless/Paperless%20Office%20for%2OGT%20Users.pdf

To avoid paying future annual fees, please submit a written request for termination of your enrollment under the general permit in a separate letter when your project has been completed and the permit is no longer needed. Be aware that the annual fee covers the fiscal year billing period beginning July 1 and ending June 30, the following year. You will pay the full annual fee

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if your request for termination is made after the beginning of the new fiscal year beginning July 1.

If you have any questions, please contact Mr. Daniel P. Pirotton at (213) 576 – 6714 or at daniel.pirotton@waterboards.ca.gov for issues regarding the underground storage tank program or Dr. Eric Wu at (213) 576 – 6683 or at eric.wu@waterboards.ca.gov for issues regarding the WDR.

Sincerely,

Samuel Unger, P.E.
Executive Officer

Enclosure:

Monitoring and Reporting Program CI-10299

CC:

Micah Reich, State Water Resources Control Board, UST Cleanup Fund Brian Partington, Water Replenishment District of Southern California Kristine Martinez, Blaes Environmental Management Marla Madden, ExxonMobil Environmental Services

STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM CI NO. 10299

FOR

CIRCLE K STORE NO. 2211106
(FORMER MOBIL STATION NO. 18-LR4)
501 NORTH LAS POSAS ROAD, CAMARILLO, CALIFORNIA
(INSITU CHEMICAL OXIDATION FOR GROUNDWATER CLEANUP)
(ORDER NO. R4-2014-0187, SERIES NO. 092)

I. REPORTING REQUIREMENTS

A. Circle K Stores Incorporated (hereinafter Discharger) shall implement this monitoring program on the effective date of this Monitoring and Reporting Program (MRP). The first monitoring report under this MRP, for the period from January to June 2017, shall be received at the Los Angeles Regional Board by July 15, 2017. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

Monitoring PeriodReport DueJanuary – JuneJuly 15July – DecemberJanuary 15

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP to the State Water Resources Control Board (State Board) GeoTracker database, Attention: Information Technology Unit.

If there is no discharge or injection during any reporting period, the report shall so state.

- B. Laboratory analyses all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the State Board Division of Drinking Water Environmental Laboratory Accreditation Program (ELAP). A copy of the laboratory certification shall be provided each time a new and/or renewal certification is obtained from ELAP.
- C. The method limits (MLs) employed for effluent analyses shall be lower than the permit limits established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Los Angeles Regional Board Executive Officer (Executive Officer). The Discharger shall submit a list of the analytical methods employed for each test and the associated laboratory quality assurance/quality control (QA/QC)

procedures upon request by the Los Angeles Regional Board.

- D. Groundwater samples must be analyzed within allowable holding time limits as specified in 40 CFR Part 136. All QA/QC samples must be run on the same dates when samples were actually analyzed. The Discharger shall make available for inspection and/or submit the QA/QC documentation upon request by Los Angeles Regional Board staff.
- E. Each monitoring report must affirm in writing "All analyses were conducted at a laboratory certified for such analyses by the State Board ELAP and in accordance with current United States Environmental Protection Agency (USEPA) guideline procedures or as specified in this Monitoring Program." Proper chain of custody procedures must be followed and a copy of the completed chain of custody form shall be submitted with the report.
- F. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with WDRs. This section shall be located at the front of the report and shall clearly list all non-compliance with WDRs, as well as all excursions of effluent limitations.
- G. The Discharger shall maintain all sampling and analytical results: date, exact place, and time of sampling; dates analyses were performed; analyst's name; analytical techniques used; and results of all analyses. Such records shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge, or when requested by the Regional Board.
- H. If the Discharger performs analyses on any groundwater samples more frequently than required by this MRP using approved analytical methods, the results of those analyses shall be included in the report.
- In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized to demonstrate compliance with the requirements and, where applicable, shall include results of receiving water observations.
- J. The Discharger should not implement any changes to the MRP prior to receiving Executive Officer's written approval.
- K. In accordance with regulations adopted by the State Board regarding electronic submittal of information, UST monitoring reports have been electronically submitted to the State Board GeoTracker system under the UST Global ID T0611100544. To comply with the MRP under this WDR, the Discharger shall upload the WDRs monitoring reports to the GeoTracker system under both Global IDs T0611100544 (continuing) and WDR100039556 (new).

II. OZONE SPARGING MONITORING REQUIREMENTS

The reports shall contain the following information regarding sparging activities:

- A location map showing sparging points used for the ozone sparge feasibility study. Groundwater monitoring wells shall not be used as injection points to avoid reduction of groundwater monitoring network, data bias, well screen clogging and alteration. Additional injection points for full scale application should be reviewed and approved by the Los Angeles Regional Board prior to full scale implementation.
- 2. Written and tabular summary defining the quantity of ozone sparge to the groundwater and a summary describing the days on which the system was in operation.

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct groundwater monitoring at the site. Groundwater samples shall be collected from all onsite and offsite wells associated with the site. Groundwater shall be monitored for the duration of the remediation in accordance with the following monitoring program:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS ¹
Total petroleum hydrocarbons as gasoline (TPH _G) and as diesel (TPH _D)	µg/L³	Grab	Semi-Annually
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	μg/L	Grab	Semi-Annually
Methyl tertiary butyl ether (MTBE), Tertiary butyl alcohol (TBA), Tertiary amyl methyl ether (TAME), Di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE)	μg/L	Grab	Semi-Annually
Naphthalene	μg/L	Grab	Semi-Annually
Ethanol, Formaldehyde Acetone	μg/L	Grab	Semi-Annually
Total dissolved solids, Arsenic, Boron, Chloride, Bromide, Sulfate, Lead, Nickel, Cadmium, Manganese	mg/L ⁴	Grab	Semi-Annually
Oxidation-reduction potential (ORP)	Millivolts	Grab	Semi-Annually
Dissolved Oxygen	μg/L	Grab	Semi-Annually
Dissolved Ferrous Iron	μg/L	Grab	Semi-Annually
Total Chromium and Hexavalent Chromium ²	μg/L	Grab	Semi-Annually

	T		
рН	pH units	Grab	Semi-Annually
Temperature	°F/°C	Grab	Semi-Annually
Groundwater Elevation	Feet, mean sea level and below ground surface	In situ	Semi-Annually

One week before injection and semi-annually thereafter.

μg/L = microgram per liter.
 mg/L = milligram per liter.

All groundwater monitoring reports must include, at a minimum, the following:

- a. Well identification, date and time of sampling;
- b. Sampler identification, and laboratory identification;
- c. Semi-annual observation of groundwater levels, recorded to 0.01 feet mean sea level, and calculated groundwater flow direction.

IV. MONITORING FREQUENCIES

Specifications in the MRP are subject to periodic revisions. Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

The Discharger is required to monitor for total chromium and hexavalent chromium in the baseline, second and fourth semi-annual sampling. If detected at any of these sampling events, the total chromium and chromium six must be monitored semi-annually thereafter.

V. <u>CERTIFICATION STATEMENT</u>

VI.

Ordered by:

Samuel Unger, P.E. Executive Officer

Each report shall contain the following declaration:

"I certify under penalty of law that this document, including all attachments and supplemental information, was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Executed on theday of	at
	(Signature)
	(Title)"
PUBLIC DOCUMENTS	
These records and reports are public docume inspection during normal business hours at the Board, upon request by interested parties.	nts and shall be made available for e office of the Los Angeles Regional
dby: Samuel Unger	Date: <u>February</u> 17, 2017