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MATTHEW RODRIQUEZ SECRETARY FOR ENVIRONMENTAL PROTECTIO

Los Angeles Regional Water Quality Control Board

April 1, 2015

Mr. Rex Abacan Circle K Stores, Inc. 255 East Rincon Street, Suite 100 Corona, CA 92879 CERTIFIED MAIL RETURN RECEIPT REQUESTED CLAIM NO.: 7012 1640 0000 6294 6882

GENERAL WASTE DISCHARGE REQUIREMENTS FOR IN-SITU GROUNDWATER REMEDIATION AND GROUNDWATER RE-INJECTION CIRCLE K #2211182 / FORMER MOBIL #18-LKA 6100 SEPULVEDA BOULEVARD, CULVER CITY; CASE NO. R-07139; PRIORITY B-2; GLOBAL ID. T0603704754 ORDER NO. R4-2014-0187; SERIES NO. 020; CI NO. 10143

Dear Mr. Abacan:

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

The site is the Circle K #2211182 / Former Mobil #18-LKA facility located at the eastern intersection of South Sepulveda Boulevard and Green Valley Circle in Culver City, California. The site includes one 12,000-gallon gasoline underground storage tank (UST), one 10,000-gallon gasoline UST, one 8,000-gallon gasoline UST, and one 550-gallon waste oil UST.

Groundwater was first identified as impacted in 2004. The most recent groundwater monitoring data (December 2014) reported a maximum total petroleum hydrocarbons as gasoline (TPH_G), benzene, methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) concentrations of 420 micrograms per liter (μ g/L) (TPH_G), 2.2 μ g/L (benzene), 360 μ g/L (MTBE), and 2,100 μ g/L (TBA), respectively. The concentration of MTBE during the previous monitoring event in May 2014 was considerably higher (6,300 μ g/L). The depth to groundwater has historically ranged from 19 to 33 feet below ground surface (bgs) and currently ranges from approximately 26.31 feet to 32.90 feet bgs. Groundwater flow direction is somewhat variable, often reported to be southeasterly or northerly.

The Regional Board letter dated June 2, 2014, approved the "Workplan for Groundwater Ozone Sparge Remedial Feasibility Testing" (interim Remedial Action Plan – interim RAP), dated April 30, 2014, submitted by Blaes Environmental (Blaes). The interim RAP proposed to inject ozone at two locations (OS-1 and OS-2) in the vicinity of monitoring well MW08 to perform a pilot test for approximately 5 weeks.

We have completed our review of your application and determined that the proposed discharge meets the conditions specified in Order No. R4-2014-0187, "General Waste Discharge Requirements for In-Situ Groundwater Remediation and Groundwater Re-Injection" adopted by the Los Angeles Regional Water Quality Control Board on September 11, 2014.

CHARLES STRINGER, CHAIR | SAMUEL UNGER, EXECUTIVE OFFICER

320 West 4th St., Suite 200, Los Angeles, CA 90013 | www.waterboards.ca.gov/losangeles



Ozone is permitted as a chemical oxidant in the General WDRs, Order No. R4-2014-0187.

Enclosed are your WDRs, consisting of Regional Board Order No. R4-2014-0187 (available online at:

http://www.waterboards.ca.gov/losangeles/board_decisions/adopted_orders/docs/GeneralWDR R4-2014-0187.pdf), Monitoring and Reporting Program (MRP) No. CI – 10143, and Standard Provisions. These allow the use of ozone for in-situ groundwater remediation at the site. This MRP and the General WDRs constitute the WDRs for the proposed pilot study and full-scale implementation.

The MRP requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2014-0187. All monitoring reports shall be sent to the Regional Board, <u>ATTN: Information Technology Unit</u>. Please include a reference to MRP No. CI – 10143 when submitting technical monitoring reports to the 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, UST Program monitoring reports have been electronically submitted to the State Board GeoTracker system under the UST Global ID T0603704754. To comply with the MRP under the WDR, you shall upload the WDR monitoring reports to the State Database GeoTracker under both Global IDs T0603704754 (continuing) and WDR100021465 (new). 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=7d ad4352c990334b

Effective November 1, 2011, the Los Angeles Regional Water Quality Control Board implemented a Paperless Office system. For all parties who upload electronic documents to the GeoTracker Database, it is no longer necessary to email a copy of these documents to losangeles@waterboards.ca.gov or submit hard copies to our office. The Regional Board will no longer accept documents (submitted by either hard copy or email) already uploaded to GeoTracker.

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

Mr. Rex Abacan Circle K #2211182 / Former Mobil #18-LKA 3 6100 Sepulveda Blvd.

If you have any questions, please contact Mr. Dave Bjostad at (213) 576-6712 or dave.bjostad@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 C

Samuel Unger. **Executive Officer**

Enclosure:

1. Regional Board Order No. R4-2014-0187

2. Monitoring and Reporting Program CI - 10143

3. Standard Provisions

copy by e-mail:

Kathy Jundt, State Water Resources Control Board, UST Cleanup Fund Tim Smith, Los Angeles County DPW, Environmental Program Division Lusi Mkhitaryan, County of Los Angeles, Department of Public Health, Drinking Water Programs Phuong Ly, Water Replenishment District of Southern California Matt Livingston, Blaes Environmental

copy by mail:

John Bartlett, Bartlett Family Trust (property owner)

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

MONITORING AND REPORTING PROGRAM NO. CI – 10143

FOR

CIRCLE K #2211182 / FORMER MOBIL #18-LKA 6100 SEPULVEDA BOULEVARD, CULVER CITY, CA

(OZONE INJECTION FOR GROUNDWATER CLEANUP) (ORDER NO. R4-2014-0187, SERIES NO. 020)

REPORTING REQUIREMENTS

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A. Circle K Stores, Inc. (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 pilot test to be performed during the period from January to June 2015, shall be received at the Regional Board by July 15, 2015. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

Monitoring Period	Report Due		
January – June	July 15		
July – December	January 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 (SWRCB) 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 Water Resources Control Board (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 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

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request by the 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 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.
- I. 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 T0603704754. To comply with the MRP under this WDR, the Discharger shall upload the WDRs monitoring reports to the GeoTracker system under both Global IDs T0603704754 (continuing) and WDR100021465 (new).

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Order No. R4-2014-0187 Monitoring & Reporting Program No. CI – 10143

II. OZONE INJECTION MONITORING REQUIREMENTS

The reports shall contain the following information regarding injection activities:

- 1. A location map showing injection points.
- 2. Written and tabular summary defining the quantity of ozone injected on each injection date, the cumulative quantity injected at each location, and the total cumulative amount injected at the site.

Groundwater monitoring wells shall not be used as injection points to avoid reduction of groundwater monitoring network, data bias, well screen clogging and alteration. Two injection points (OS-1 and OS-2) near MW08 are proposed (Figure 1) for the pilot test. Additional injection points for full scale application must be reviewed and approved by the Regional Board prior to full-scale implementation.

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct groundwater monitoring at the site to monitor the effectiveness and ensure no adverse impacts from the injections. Groundwater samples shall be collected from four groundwater monitoring wells in various directions (MW05 to the north, MW02 to the west-northwest, MW07 to the south, and MW13 to the southeast), since the flow direction appears to be somewhat variable. Additional monitoring wells for full-scale implementation may be required by the Regional Board. During the feasibility study, groundwater samples shall be collected approximately forty-five and ninety days after the initial injection; constituents analyzed shall be the same as in the table below. Groundwater shall be monitored for the duration of the full-scale 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
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

^{1.} One week before injection and semi-annually thereafter.

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.

^{3.} µg/L = microgram per liter.

⁴. 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.

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V. CERTIFICATION STATEMENT

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 gualified 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 the	day of	at	•
			(Signature)
			(Title)"

VI. PUBLIC DOCUMENTS

These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the Regional Board, upon request by interested parties.

Ordered by: <u>Samuel Unger</u>, P.E. Executive Officer

Date: April 1, 2015



Fig. 1