

Los Angeles Regional Water Quality Control Board

November 9, 2015

Manuel Gallegos
Former Gasoline Station
2060 McPherson Place
Los Angeles, CA 90032

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
CLAIM NO.: 7014 2870 0001 4537 7989

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER REMEDIATION
AT PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND / OR
HEXAVALENT CHROMIUM IMPACTED SITES (ORDER NO. R4-2014-0187; SERIES NO.
260; CI NO. 10174)**

**MANUEL GALLEGOS FORMER GASOLINE STATION (PRIORITY D – 1)
4635 VALLEY BOULEVARD, LOS ANGELES, CA (UST CASE NO. 900320161)**

Dear Mr. Gallegos:

We are in receipt of your application for coverage under the General Waste Discharge Requirements (WDR) utilizing In Situ Chemical Oxidation (RegenOX) followed by the injection of Oxygen Release Compound (ORC) for groundwater remediation.

The site is a former gasoline station located at the north side of Valley Boulevard in Los Angeles, California. In May 2005, two 8,000-gallon gasoline underground storage tank (UST), and one 10,000-gallon gasoline or diesel UST were removed from the site.

The most recent groundwater sampling data in June 2015, detected concentrations of total petroleum hydrocarbon as gasoline (TPH_G) of 230,000 µg/L, benzene of 31,000 µg/L, toluene of 20,000 µg/L, ethylbenzene of 6,000 µg/L, xylenes of 33,000 µg/L, methyl tertiary butyl ether (MTBE) of 120 µg/L and tertiary butyl alcohol (TBA) of 500 µg/L.

In a technical report titled "Addendum to Modified Interim Remedial Action Plan" (RAP), dated October 9, 2015, your consultant, Gaston & Associates (G&A), proposed to inject RegenOX and ORC into the groundwater to expedite cleanup process at the site. Regional Board staff approved the RAP in a directive dated October 22, 2015.

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.

RegenOX and ORC are permitted as 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_injection_of_ISR.pdf for guidance.

Enclosed is Monitoring and Reporting Program No. CI-10174 (MRP) which allows the use of RegenOX and ORC Injection 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-10174 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, Underground Storage Tank Program (UST) monitoring reports have been electronically submitted to the State Board GeoTracker system under the UST Global ID T0603507404. 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 T0603507404 and WDR100024752. 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>

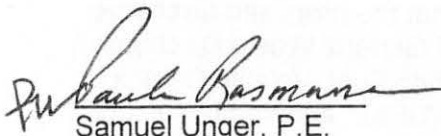
For all parties who upload electronic documents to the State GeoTracker Database, the Regional Board will no longer accept documents (submitted by either hard copy or email) that already have been uploaded to GeoTracker. Please see Electronic Submittal to the Los Angeles Regional Board for GeoTracker Users dated December 12, 2011 at:

<http://www.waterboards.ca.gov/losangeles/resources/Paperless/Paperless%20Office%20for%200GT%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 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. Magdy Baiady at (213) 576-6699 or mbaiady@waterboards.ca.gov for issues regarding the underground storage tank program or Dr. Eric Wu at (213) 576 - 6683 or at ewu@waterboards.ca.gov for issues regarding the WDR.

Sincerely,



Samuel Unger, P.E.
Executive Officer

Enclosure: Monitoring and Reporting Program CI-10174
Copy of the RAP Approval letter dated October 22, 2015

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. CI-10174
FOR
FORMER GASOLINE STATION
4635 EAST VALLEY BOULEVARD, LOS ANGELES, CA
(REGENOX AND ORC INJECTION FOR GROUNDWATER CLEANUP)
(ORDER NO. R4-2014-0187, SERIES NO. 260)

I. REPORTING REQUIREMENTS

- A. Manuel Gallegos (Former Gasoline Station) (Discharger) shall implement this monitoring program on the effective date of the enrollment under Regional Board Order No. R4-2014-0187. The first monitoring report under this program shall be received at the Regional Board by **January 15, 2016**. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>
January – June	July 15 th
July – December	January 15 th

- B. If there is no discharge or injection during any reporting period, the report shall so state.
- C. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California 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.
- D. 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 request by the Regional Board.
- E. 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.
- F. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California 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.
- G. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance"

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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.

- H. 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.
- I. If the Discharger performs analyses on any groundwater samples more frequently than required by this Order using approved analytical methods, the results of those analyses shall be included in the report.
- J. 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.
- K. In accordance with regulations adopted by the State Water Resource Control Board (State Board) in September 2004 regarding electronic submittal of information (ESI), the Discharger has been electronically submitting Underground Storage Tank Program (UST) technical reports to the State Board GeoTracker system under the UST Global ID T0603507404. To comply with this MRP, the Discharger shall upload the MRP monitoring reports to the Geotracker under the two Global ID T0603507404 (continuing) and WDR100024752 (new).

II. DISCHARGE MONITORING REQUIREMENTS

The reports shall contain the following information regarding injection activities:

1. Location map showing application area.
2. Written summary defining:
 - Depth of insertion and depth to groundwater;
 - Quantity of RegenOX and ORC per area; and
 - Total amount of RegenOX and ORC applied at site.
3. Groundwater monitoring wells shall not be used as RegenOX and ORC injection points to avoid reduction of groundwater monitoring network, data bias, well screen clogging and alternation. Separate injection points must be installed for the proposed chemical oxidation injection.

III. GROUNDWATER MONITORING PROGRAM

A groundwater-monitoring program shall be designed to detect and evaluate impacts associated with the RegenOX and ORC application. The monitoring program shall consist of upgradient wells MW-4 and MW-6, source wells MW-1, MW-2 and MW-5 and downgradient wells MW-8, MW-9 and MW-10 (See Figure 2). A baseline monitoring and sampling shall be conducted one or two weeks prior to the proposed RegenOX and ORC application. Baseline monitoring will establish the initial conditions with respect to the contaminant levels. These sampling stations shall not be changed and any proposed change of monitoring locations shall be identified and approved by the Executive Officer. The Discharger shall conduct regular sampling with the required frequencies from the up-gradient, down-gradient, and source monitoring wells for the following constituents:

<u>CONSTITUENT</u>	<u>UNITS</u> ¹	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
pH ²	PH units	Grab	Semi-Annually
Temperature ²	^o F	grab	Semi-Annually
Oxidation-reduction potential ²	Milivolts	grab	Semi-Annually
Specific conductivity ²	μmhos/cm	grab	Semi-Annually
Ferrous iron	μg/L	grab	Semi-Annually
Dissolved Oxygen ²	μg/L	grab	Semi-Annually
MTBE	μg/L	grab	Semi-Annually
Tert-Butyl Alcohol (TBA)	μg/L	grab	Semi-Annually
Di-isopropyl Ether (DIPE)	μg/L	grab	Semi-Annually
Ethyl-t-Butyl Ether (ETBE)	μg/L	grab	Semi-Annually
Tert-Amyl-Methyl Ether (TAME)	μg/L	grab	Semi-Annually
Acetone	μg/L	grab	Semi-Annually
Formaldehyde	μg/L	grab	Semi-Annually
Total Petroleum Hydrocarbons as gasoline (TPHg)	μg/L	grab	Semi-Annually
Benzene	μg/L	grab	Semi-Annually
Ethylbenzene	μg/L	grab	Semi-Annually
Toluene	μg/L	grab	Semi-Annually
Total xylenes	μg/L	grab	Semi-Annually
Naphthalene	μg/L	grab	Semi-Annually

Methane	µg/L	grab	Semi-Annually
Total organic carbon	µg/L	grab	Semi-Annually
Total dissolved solids	mg/L	grab	Semi-Annually
Sulfate	mg/l	grab	Semi-Annually
Chloride	mg/L	grab	Semi-Annually
Boron	mg/L	grab	Semi-Annually
Carbon dioxide	mg/L	grab	Semi-Annually
Manganese	µg/L	grab	Semi-Annually
Total iron	µg/L	grab	Semi-Annually
Alkalinity	µg/L	grab	Semi-Annually
Chromium (VI) ³	mg/L	grab	Semi-Annually ³
Total Chromium ³	mg/L	grab	Semi-Annually ³

¹ mg/L: milligrams per liter; µg/L: micrograms per liter; µmhos/cm: microohms per centimeter; °F: degree Fahrenheit.

² Field instrument will be used to test for this constituent.

³ The Discharger is required to monitor for total chromium and chromium six 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.

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

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

IV. MONITORING FREQUENCIES

Specifications in this monitoring program are subject to periodic revisions. Monitoring requirements may be modified or revised by the Executive Officer based on review of monitoring data submitted pursuant to this Order. Monitoring frequencies may be adjusted to a less frequent basis or parameters and locations dropped by the Executive Officer if the Discharger makes a request and the request is backed by statistical trends of monitoring data submitted.

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 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 the _____ day of _____ at _____.

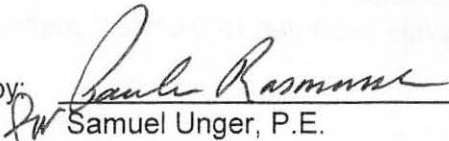
(Signature)

(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 California Regional Water Quality Control Board, Los Angeles Region.

Ordered by:



Samuel Unger, P.E.
Executive Officer

Date: November 9, 2015