

Los Angeles Regional Water Quality Control Board

April 25, 2014

Mr. John Manavian
Robertson Properties Group
120 North Robertson Boulevard
Los Angeles, California 90048

Certified Mail
Return Receipt Required
Claim No. 7010 3090 0002 1022 1578

REVISED MONITORING AND REPORTING PROGRAM NO. CI-9688 – REGENCY CENTER (FORMER LAKEWOOD KOHLS), 2650 EAST CARSON STREET, LAKEWOOD, CALIFORNIA (FILE NO. 11-047, ORDER NO. R4-2007-0019, SERIES NO. 161, CI-9688, GLOBAL ID. WDR100000981)

Dear Mr. Manavian:

On May 12, 2011, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) enrolled you under general Waste Discharge Requirements (WDR Order No. R4-2007-0019) with a Monitoring and Reporting Program (MRP) No. CI-9688 for the injection of activated persulfate solution to assess the feasibility of in-situ chemical oxidation (ISCO) to remediate tetrachloroethylene (PCE) impacted groundwater at the subject site.

On behalf of Regency Center, LLC, Environmental Engineering & Contracting, Inc. submitted the *Work Plan for On-site Supplemental Chemical Oxidation Pilot Study (Work Plan)*, dated February 14, 2014. The Work Plan proposed a supplemental ISCO pilot study using potassium permanganate because the treatability study results indicated potassium permanganate was the most effective oxidant tested for PCE reduction at the bench-scale level. It is estimated that 100,000 gallons of 3% potassium permanganate solution will be injected into 10 injection locations at depths ranging from 43 to 64 feet below ground surface. On March 25, 2014, the Regional Board approved the Work Plan.

The proposed supplemental injection shall not exceed 100,000 gallons of 3% potassium permanganate solution at 10 injection locations as indicated in the Figure 1 of the revised MRP. The injection activities are expected to take approximately 4 weeks.

The revised MRP, which incorporates supplemental injection of potassium permanganate solution is enclosed. The proposed discharge shall not cause the mineral constituents of the receiving groundwater at the compliance point, downgradient outside the application area, in excess of applicable limits (Central Basin of the Los Angeles Coastal Plain Groundwater Basin) given in Attachment Table 3-10 of Order No. R4-2007-0019. The next monitoring report is due on **July 15, 2014** as required in the revised MRP. Please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data, discharge location data, and pdf monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100000981. ESI training video is 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 State Database GeoTracker, 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. 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%20GT%20Users.pdf>

To avoid paying future annual fees, please submit a written request for termination of your enrollment under the general WDR in a separate letter when the project is completed and the WDR 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 the Project Manager, Dr. Ann Chang at (213) 620-6122 (achang@waterboards.ca.gov), or the Chief of Groundwater Permitting Unit, Dr. Eric Wu at (213) 576-6683 (ewu@waterboards.ca.gov).

Sincerely,


Samuel Unger, P.E.
Executive Officer

Enclosure: Revised Monitoring and Reporting Program No. CI-9688 dated April 25, 2014

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

REVISED MONITORING AND REPORTING PROGRAM NO. CI-9688
FOR
REGENCY CENTER (FORMER LAKEWOOD KOHLS)
2650 EAST CARSON STREET, LAKEWOOD, CALIFORNIA

ENROLLMENT UNDER REGIONAL BOARD
ORDER NO. R4-2007-0019 (SERIES NO. 161)
FILE NO. 11-047

I. MONITORING AND REPORTING REQUIREMENTS

- A. Regency Center, LLC (hereinafter Discharger) shall implement this Monitoring and Reporting Program (MRP) on the effective date of the enrollment (April 25, 2014) under Regional Board Order No. R4-2007-0019. The next monitoring report under this program shall be received at the Regional Board by **July 15, 2014**. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>
January – March	April 15
April – June	July 15
July – September	October 15
October – December	January 15

- B. If there is no discharge or injection, during any reporting period, the report shall so state. By March 1 of each year, the Discharger shall submit an annual summary report to the Regional Board. The report shall contain both tabular and graphical summaries of the monitoring data obtained during the previous calendar year. In addition, the Discharger shall discuss the compliance record and the corrective actions taken or planned, which may be needed to bring the discharge into full compliance with the waste discharge requirements.
- C. The Discharger shall comply with requirements contained in Section G of Order No. R4-2007-0019 "*Monitoring and Reporting Requirements*".

II. DISCHARGE MONITORING PROGRAM

The monitoring reports shall contain the following information regarding the injection activities:

1. Location map showing injection points used for the potassium permanganate solution.
2. Written and tabular summary defining depth of injection points, quantity of the potassium permanganate solution injected at each injection point, and total amount of the potassium permanganate solution injected at the Site.
3. Visual inspection at each injection point shall be conducted and recorded during the injection.

III. GROUNDWATER MONITORING PROGRAM

A groundwater monitoring program shall be implemented to evaluate impacts associated with the injection activity. Groundwater samples shall be collected from monitoring wells MW-2, MW-3, and MW-4, and piezometers PZ-1 through PZ-9 (Figure 1). The Discharger shall conduct a baseline sampling prior to the proposed injection, followed by specified schedules from all 12 monitoring wells for the following groundwater parameters:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Dissolved Oxygen	mg/L	grab	Baseline and quarterly after injection
Oxidation-Reduction Potential	millivolts	grab	Baseline and quarterly after injection
pH	pH units	grab	Baseline and quarterly after injection
Specific Conductivity	mS/cm	grab	Baseline and quarterly after injection
Temperature	°C	grab	Baseline and quarterly after injection
Turbidity	NTU	grab	Baseline and quarterly after injection
Total Organic Carbon	mg/L	grab	Baseline and quarterly after injection

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total Dissolved Solids	mg/L	grab	Baseline and quarterly after injection
Sulfate	mg/L	grab	Baseline and quarterly after injection
Chloride	mg/L	grab	Baseline and quarterly after injection
Boron	mg/L	grab	Baseline and quarterly after injection
Nitrate and Nitrite	mg/L	grab	Baseline and quarterly after injection
Manganese	mg/L	grab	Baseline and quarterly after injection
Volatile Organic Compounds	µg/L	grab	Baseline and quarterly after injection

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 completed 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

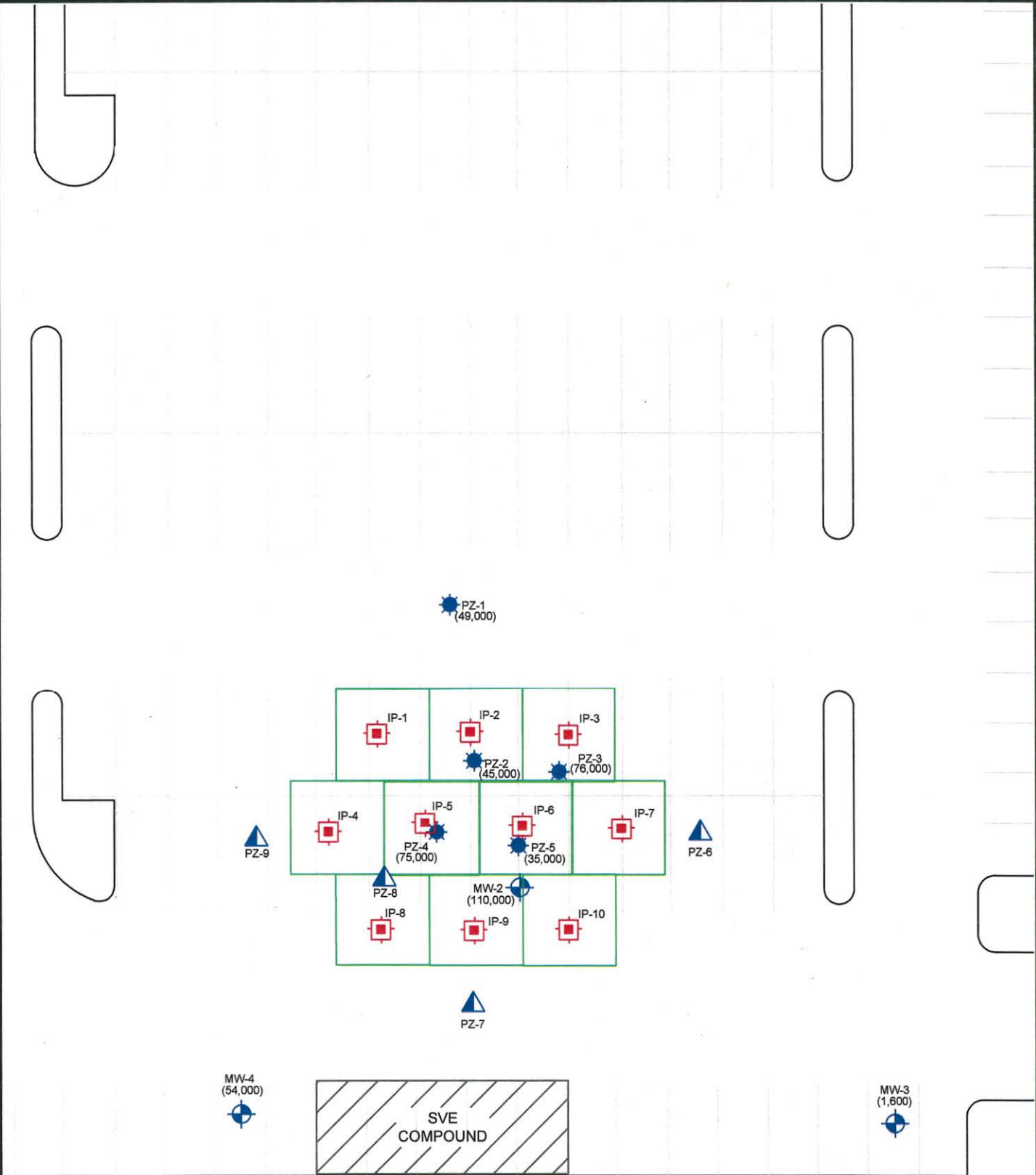
All records and reports submitted in compliance with Order No.R4-2007-0019 and Monitoring and Reporting Program No. CI-9688 are public documents and will be made available for inspection during business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region, upon request by interested parties. Only proprietary information, and only at the request of the Discharger will be treated as confidential.

VII. ELECTRONIC SUBMITTAL OF INFORMATION

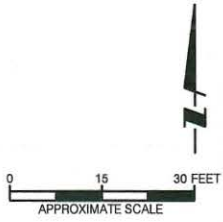
The Discharger shall comply with the Electronic Submittal of Information (ESI) requirements by submitting all reports required under the MRP, including groundwater monitoring data in Electronic Deliverable Format, discharge location data, and searchable Portable Document Format of monitoring reports to the State Water Resources Control Board GeoTracker database under Global ID WDR100000981.

Ordered by: _____
Samuel Unger, P.E.
Executive Officer

Date: April 25, 2014



- Legend**
- IP-1 Proposed Injection Well Semi-Permanent
 - PZ-8 Proposed Piezometer
 - MW-4 Monitoring Well PCE Concentration (ug/L)
 - PZ-1 Piezometer PCE Concentration (ug/L)



PROPOSED SUPPLEMENTAL ISCO INJECTION MAP

Regency Center, LLC
2650 Carson Street
Lakewood, California

Date
February 4, 2014

Drafter
AN

PE/PG MZ	Project Number S1362.08
Project Manager AD	File S1362-2013-WP-04

Figure
1