



# California Regional Water Quality Control Board

## Los Angeles Region



Recipient of the 2001 *Environmental Leadership Award* from Keep California Beautiful

Linda S. Adams  
Agency Secretary

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RF  
Arnold Schwarzenegger  
Governor

May 14, 2007

Mr. Nelson Reynolds  
El Dorado Cleaners  
8171 E. Wardlow Road  
Long Beach, CA 90808

**APPROVAL – REQUEST FOR MODIFICATION TO REVISED MONITORING AND REPORTING PROGRAM NO. CI-8496, POTASSIUM PERMANGANATE INJECTION AT EL DORADO CLEANERS, 8171 WARDLOW ROAD, LONG BEACH, CALIFORNIA. (SLIC NO. 822, SITE ID 204BF00)**

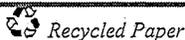
Dear Mr. Reynolds:

The California Regional Water Quality Control Board – Los Angeles Region (Regional Board) has received and reviewed the April 9, 2007 letter (Letter) prepared by your consultant, Levin Fricke, for the referenced site. The Letter requests modification to the sampling frequency of certain monitoring parameters as specified in the current Revised Monitoring and Reporting Program (Revised MRP) No. CI-8496, under General Waste Discharge Requirements Order (WDR) No. R4-2005-0030.

Tetrachloroethene (PCE) released from previous dry cleaning operations on the subject property has impacted the underlying soil and groundwater. The PCE source in soil has been removed and the impact in groundwater has been adequately delineated for site cleanup. A WDR (General No. R4-2002-0030) was first issued on November 22, 2002 for the subject site to inject hydrogen release compound into the underlying groundwater to cleanup the impact of volatile organic compounds (VOCs). On May 5, 2005, this Regional Board adopted General WDR Order No. R4-2005-0030 to supersede General WDR Order No. R4-2002-0030. Per your request, General WDR Order No. R4-2005-0030 was issued on December 16, 2005 to allow the injection of potassium permanganate solution at your site to cleanup the dissolved-phase VOCs in the underlying groundwater. Based on the data already collected following the first injection event, PCE reduction in the source area was remarkable and the monitoring parameters after the injection were stable. Therefore, you proposed the following modifications to the Revised MRP for the subsequent injection events:

- 1) Change frequency of the following parameters from weekly to every other week for the first month and from monthly to every other month for the second through sixth months:
  - Temperature
  - Color
  - Chromium
  - Hexavalent Chromium
- 2) Change the frequency of the following parameters from quarterly to every other quarter:
  - Major Anions
  - Major Cations

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Mr. Nelson Reynolds  
El Dorado Cleaners

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May 14, 2007

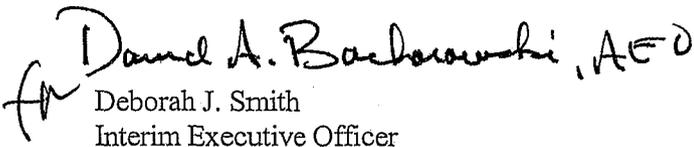
Based on our review of the information submitted, we concur with the proposed modifications. We have revised the Revised MRP No. CI-8496 for you to implement, effective immediately. This Revised MRP (attached) shall replace the Revised MRP issued on December 16, 2005.

WDR Order No. R4-2007-0019 was adopted on March 1, 2007 to supersede WDR Order No. R4-2005-0030. A PDF version of this new WDR is available at:  
[http://www.waterboards.ca.gov/losangeles/html/permits/gen\\_orders/R4-2007-0019.pdf](http://www.waterboards.ca.gov/losangeles/html/permits/gen_orders/R4-2007-0019.pdf).

Please notify this Regional Board 72 hours before any fieldwork is commenced.

**If you have any questions regarding this matter, please contact Dr. Kwangil Lee at (213) 576-6734 or Mr. Jeffrey Hu at (213) 576-6736.**

Sincerely,

  
Deborah J. Smith  
Interim Executive Officer

Enclosure: Revised Monitoring and Reporting Program No. CI-8496

cc: Jennifer Rothman, Levin Fricke (Costa Mesa office, [jennifer.rathman@lfr.com](mailto:jennifer.rathman@lfr.com))

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

REVISED MONITORING AND REPORTING PROGRAM NO. CI-8496  
FOR  
FORMER EL DORADO CLEANERS SITE  
8171 WARDLOW ROAD, LONG BEACH

ORDER NO. R4-2007-0019  
FILE NO. 01-116

I. REPORTING REQUIREMENTS

- A. The Discharger shall implement this revised monitoring program on the effective date of May 14, 2007 under Regional Board Order No. R4-2007-0019. The first monitoring report under this Program is due by July 15, 2007.

Monitoring reports shall be received by the dates in the following schedule:

<u>Reporting 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. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.
- C. 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.
- D. The Discharger shall comply with requirements contained in Section G of Order No. R4-2007-0019 "*Monitoring and Reporting Requirements*" in addition to the aforementioned requirements.

II. POTASSIUM PERMANGANATE INJECTION MONITORING REQUIREMENTS

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

1. Location Map showing barriers and injection points for the Potassium Permanganate:
2. Written summary defining:
  - Depth of injection points;
  - Quantity of Potassium Permanganate injected per injection point and per vertical spacing at point;
  - Total amount of Potassium Permanganate injected at site; and
  - Verification of Potassium Permanganate compound injected.

III. GROUNDWATER MONITORING PROGRAM

A groundwater monitoring program shall be designed to detect and evaluate impacts associated with the Potassium Permanganate injection activities. The following shall constitute the monitoring program for Monitoring Well Nos. MW-1, MW-2, MW-3, MW-4, MW-5 and MW-6 (Figure 2).

<u>Constituent</u>	<u>Units</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis<sup>[1]</sup></u>
Total daily injection waste flow	liters/day (to indicate solution concentration)	In situ	Daily during injection
Chlorinated Volatile Organic Compounds (EPA Method 8260 B)	µg/l	grab	Quarterly
Total Organic Carbon (EPA Method 9060 Modified)	µg/l	grab	Quarterly
Total dissolved solids and Total suspended solids	mg/l	grab	Quarterly
Specific Conductivity	µmhos/cm	grab	Quarterly
Turbidity	NTU	grab	Quarterly
pH	pH units	grab	Quarterly
Oxidation-reduction potential	millivolts	grab	Quarterly
Temperature	°F/°C	grab	<ul style="list-style-type: none"> <li>• Biweekly first month</li> <li>• Monthly second month through sixth month</li> </ul>

			<ul style="list-style-type: none"> <li>Quarterly thereafter</li> </ul>
Groundwater Elevation	Feet, mean sea level (msl) and below ground surface (bgs)	<i>In situ</i>	Quarterly
Dissolved Oxygen	µg/l	grab	Quarterly
Major Anions (bromide, chloride, sulfate, nitrate, nitrite, O-phosphate, and sulfide)	µg/l	grab	Semiannually
Major Cations (barium, calcium, magnesium, manganese, potassium and sodium)	µg/l	grab	Semiannually
Permanganate	µg/l	grab	Quarterly
Color (EPA Method 110.2)	Color unit	grab	<ul style="list-style-type: none"> <li>Biweekly first month</li> <li>Monthly second month through sixth month</li> <li>Quarterly thereafter</li> </ul>
Chromium (EPA Method 200.7 or Method 6010B)	µg/l	grab	<ul style="list-style-type: none"> <li>Biweekly first month (if detected during the first week)</li> <li>Monthly second month through sixth month</li> <li>Quarterly thereafter</li> </ul>
Hexavalent chromium (EPA Method 218.6)	µg/l	grab	<ul style="list-style-type: none"> <li>Biweekly first month (if detected during the first week)</li> <li>Monthly second month through sixth month</li> <li>Quarterly thereafter</li> </ul>

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. 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)"

V. 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.

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: David A. Baehrenschi, AEO  
Deborah J. Smith  
Interim Executive Officer

Date: May 14, 2007