



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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Arnold Schwarzenegger
Governor

April 3, 2007

Ms. Stacey Jentzsch
P. O. Box 461
Shady Cove, OR 97539

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER REMEDIATION
AT PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR
HEXAVALENT CHROMIUM IMPACTED SITES
MOTOR DOCTORS - 195 SOUTH ROBERTSON BOULEVARD, BEVERLY HILLS
(ID# I-11080) (UST CLEANUP FUND #3508)
(CI NO. 9247) (R4-2007-0019; SERIES NO. 012)**

Dear Ms. Jentzsch:

We have received your application for coverage under General Waste Discharge Requirements to inject Fenton's Reagent to enhance chemical oxidation and aerobic degradation of dissolved phase petroleum hydrocarbons and fuel oxygenates in the shallow groundwater.

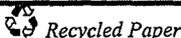
Motor Doctors (hereinafter Discharger) operated an automobile service station at 195 South Robertson Boulevard, Beverly Hills, California (Site) (Figure 1) (Latitude: 34° 03' 54", Longitude: 118° 23' 02"). The Site consisted of two 8,000-gallon underground storage tanks (USTs) and one 1,000-gallon waste oil UST. The USTs were removed in December 1987.

Subsurface site assessments following the removal of USTs found the soil and groundwater were contaminated with fuel hydrocarbons. A quarterly groundwater monitoring program has been implemented since 1992. A various configurations of soil vapor extraction/ air sparging (SVE/AS) systems have been operating on various schedules since 2000 and have removed approximately 1,007 pounds of gasoline. The most recent monitoring data indicated that maximum total petroleum hydrocarbon as gasoline (TPH_G) concentration at 26,600 µg/L, benzene concentration at 3,370 µg/L and methyl tertiary butyl ether (MTBE) concentration at 127 µg/L were detected.

A Revised Action Plan (RAP), dated October 9, 2006, prepared by Advanced Environmental Concepts, Inc (AEC), was approved by the Regional Board on November 13, 2006.

AEC proposes a two-phase approach to address the groundwater contamination. The first phase will be to conduct a pilot study on-site. AEC proposes to inject Fenton's Reagent into 23 locations spread across two separate areas. The two areas will be approximately 900 square feet each and centered around GW-2 and GW-3 (Area 1) and GW-4, and GW-5 (Area 2) (Figure 2). Injection spacing depends on site conditions and will be determined in the field. Based on the results of the pilot study, the second phase of the remedial action will address the offsite groundwater contamination.

California Environmental Protection Agency



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Ms. Stacey Jentzsch

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April 3, 2007

Existing or future groundwater monitoring wells shall not be used as injection points for application of remediation chemicals, in order to avoid reduction of groundwater monitoring network data bias, well screen clogging and alternation.

Upon completion of the first phase onsite injection, the discharger shall submit a Remedial Action Plan for the second phase in-situ remediation of offsite groundwater contamination. The Executive Officer will review and approve new sampling locations for the second phase injection.

We have reviewed the information provided and have determined that the proposed injection meets the conditions specified in Regional Board Order No. R4-2007-0019, "Revised *General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel, Volatile Organic Compound and/or Hexavalent Chromium Impacted Sites*," adopted by this Regional Board on March 1, 2007.

Enclosed are Waste Discharge Requirements consisting of Regional Board Order No. R4-2007-0019, and Monitoring and Reporting Program No. CI-9247 and Standard Provisions. The "Monitoring and Reporting Program" requires you to implement the monitoring program on the effective date of this enrollment (April 3, 2007) under Regional Board Order No. R4-2007-0019. All monitoring reports should be sent to the Regional Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to "Compliance File No. CI-9247," which will assure that the reports are directed to the appropriate file and staff. Also, please do not combine other reports with your monitoring reports. Submit each type of report as a separate document.

We are sending a copy of Order No. R4-2007-0019 only to the applicant. A copy of the Order will be furnished to anyone who requests it, or on line at :

http://www.waterboards.ca.gov/losangeles/html/permits/gen_orders/R4-2007-0019/R4-2007-0019.pdf

If you have any questions concerning this matter, please call Mr. Rodney Nelson at (213) 620-6119.

Sincerely,


Jonathan S. Bishop
Executive Officer

Enclosures: 1. Board Order No. R4-2007-0019
2. Monitoring and Reporting Program No. CI-9247

Cc: Ms. Yvonne Shanks, State Water Resources Control Board, Underground Storage Tank Cleanup Fund

Mr. Tim Smith, Los Angeles County Department of Public Works

Mr. John Buck, Advanced Environmental Concepts Inc.

Mr. Lyle Gerber, Beverly Hills Unified School District

Mr. David Akhamzadeh

California Environmental Protection Agency

 Recycled Paper

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

MONITORING AND REPORTING PROGRAM NO. CI-9247
FOR
MOTOR DOCTORS
ORDER NO. R4-2007-0019: SERIES NO. 012

I. REPORTING REQUIREMENTS

- A. Motor Doctors (hereinafter Discharger) shall implement this monitoring program on the effective date (April 3, 2007) under Regional Board Order No. R4-2007-0019. The first monitoring report under this Program is due by July 31, 2007.

Monitoring reports shall be received by the dates according to the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January – March	April 30
April – June	July 31
July – September	October 31
October – December	January 31

- 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 1st 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 explain 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 (WDRs).
- D. Laboratory analyses – all chemical, bacteriological, and toxicity analyses shall be conducted at a laboratory certified for such analyses by the California Department of Health Services 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.
- E. 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.
- F. 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.

- G. Each monitoring report must affirm in writing that "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, 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.
- H. 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.
- I. 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 unre-solved litigation regarding this discharge, or when requested by the Regional Board.
- J. 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.
- K. 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.

II. FENTON'S REAGENT INJECTION MONITORING REQUIREMENTS

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

1. Location Map showing injection point(s) of the Fenton's Reagent used during the reporting period.
2. Written summary defining:
 - Depth of injection point(s),
 - Quantity of Fenton's Reagent injected at each point; and
 - Total amount of Fenton's Reagent injected.

III. GROUNDWATER MONITORING PROGRAM

A groundwater-monitoring program shall be designed to detect and evaluate impacts associated with the injection activities. The Discharger shall sample upgradient well GW-11, source wells GW-2, GW-3, GW-4 and GW-5 and downgradient wells GW-1, GW-8, GW-9 and GW-12 to provide groundwater quality information prior to and after the Fenton's Reagent injection.

Existing or future groundwater monitoring wells shall not be used as injection points for application of remediation chemicals, in order to avoid reduction of groundwater monitoring network data bias, well screen clogging and alternation.

These sampling stations shall not be changed and any proposed change of monitoring locations shall be identified and approved by the Regional Board Executive Officer (Executive Officer) prior to their use.

Upon completion of the first phase onsite injection, the discharger shall submit a Remedial Action Plan for the second phase in-situ remediation of offsite groundwater contamination. The Executive Officer will review and approve new sampling locations for the second phase injection.

Groundwater from the wells noted above shall be monitored for the duration of the remediation in accordance with the following discharge monitoring program:

CONSTITUENT	UNITS ¹	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd)	µg/L	Grab	Weekly/Bi-weekly/Quarterly ²
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	µg/L	Grab	Weekly/Bi-weekly/Quarterly ²
Methyl tertiary butyl ether (MTBE), Tertiary butyl alcohol (TBA), Tertiary amyl methyl ether (TAME), Di-isopropyl ether (DIPE), ether (ETBE)	µg/L	Grab	Weekly/Bi-weekly/Quarterly ²
Ethanol Formaldehyde Acetone	µg/L	Grab	Weekly/Bi-weekly/Quarterly ²
PH ³	pH units	Grab	Weekly/Bi-weekly/Quarterly ²

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Dissolved Oxygen ³	µg/L	Grab	Weekly/Bi-weekly/Quarterly ²
Oxidation-reduction potential ³	millivolts	Grab	Weekly/Bi-weekly/Quarterly ²
Total dissolved solids Boron Chloride Sulfate	mg/L	Grab	Quarterly
Dissolved ferrous iron	µg/L	Grab	Quarterly
Total Chromium and chromium six	µg/L	Grab	Quarterly ⁴

¹ mg/L: milligrams per liter; g/L: micrograms per liter; mhos/cm: microohms per centimeter;
² °F: degree Fahrenheit.

² One week before injection, bi-weekly sampling for the first month of injection and quarterly sampling thereafter.

³ Field instrument may be used to measure this parameter.

⁴ Monitoring is required only for the well(s) that this constituent is detected in the baseline samples(s).

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. 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

Motor Doctors
Order No. R4-2007-0019 (Series No. 012)
Monitoring and Reporting Program No. CI #9247

ID #I-11080

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: 

Jonathan S. Bishop
Executive Officer

Date: April 3, 2007



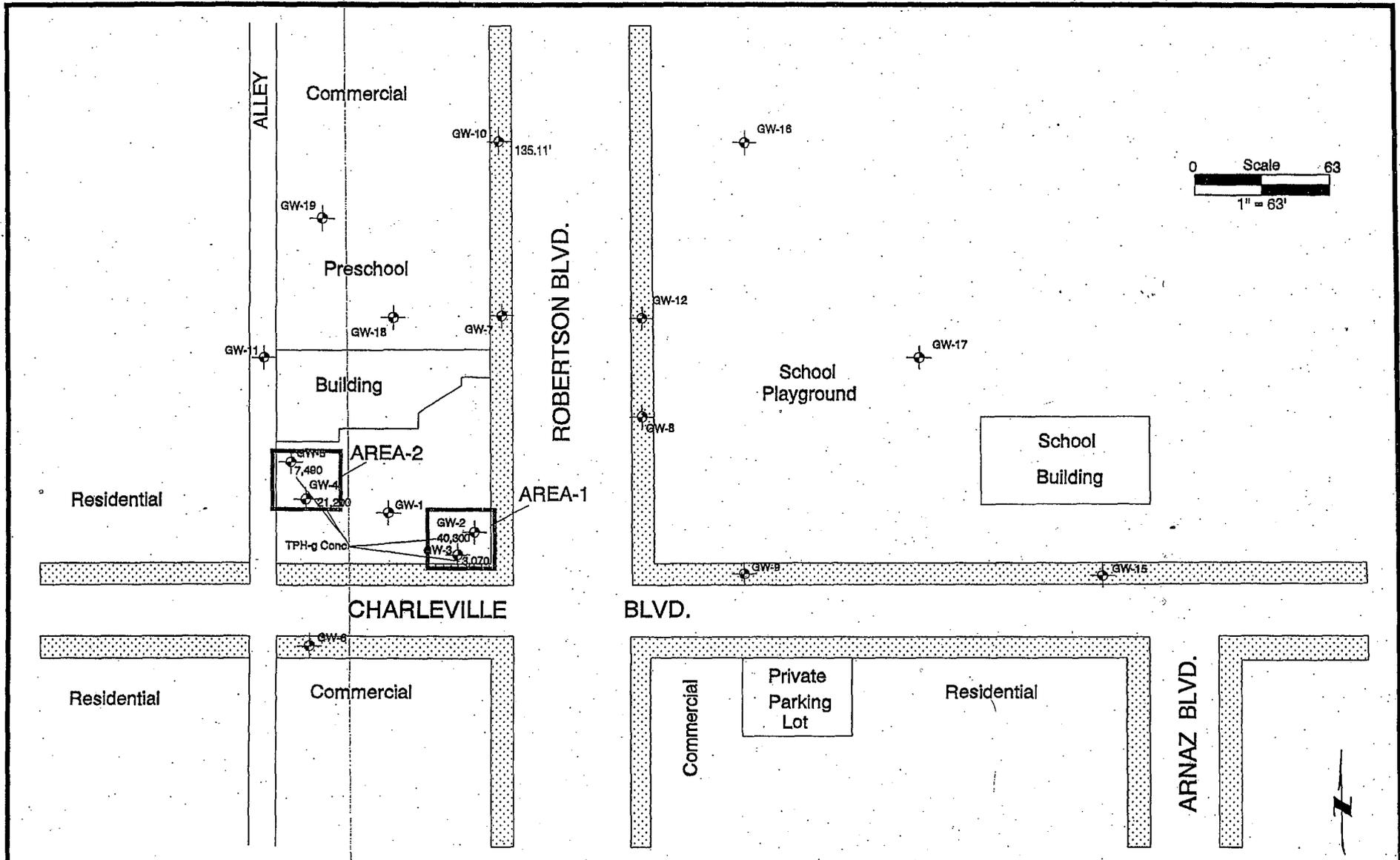
Map Source: Thomas Bros. Maps

AEC
 ADVANCED ENVIRONMENTAL CONCEPTS
 ADVANCED ENVIRONMENTAL CONCEPTS
 220 E. Truxtun Avenue
 Bakersfield, CA 93305

- Location Map -
 Motor Doctors
 195 South Robertson Boulevard
 County of Los Angeles • Beverly Hills, California

FIGURE
1

Figure 1



AEC
 ADVANCED ENVIRONMENTAL CONCEPTS INC.
 ADVANCED ENVIRONMENTAL CONCEPTS
 P.O. BOX 40672 BAKERSFIELD, CA 93384

**Proposed Fenton's Reagent Injection Locations
 Phase -1
 Motor Doctors Inc.
 195 South Robertson Boulevard
 County of Los Angeles • Beverly Hills, CA**

**FIGURE
 2**