



California Regional Water Quality Control Board

Los Angeles Region



Linda S. Adams
Agency Secretary

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

320 W. 4th Street, Suite 200, Los Angeles, California 90013
Phone (213) 576-6600 FAX (213) 576-6640 - Internet Address: <http://www.waterboards.ca.gov/losangeles>

Arnold Schwarzenegger
Governor

August 14, 2007

Mr. Yasser Tabbaa
EDCO Stations, Inc.
5050 East Olympic Boulevard
Los Angeles, CA 90022

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT
PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR
HEXAVALENT CHROMIUM IMPACTED SITES (ORDER NO. R4-2007-0019)
EDCO STATION (PRIORITY A-1 SITE)
5050 EAST OLYMPIC BOULEVARD, LOS ANGELES, CA (FILE NO. R-23866)**

Dear Mr. Tabbaa:

We have completed our review of the application for coverage under General Waste Discharge Requirements to inject sodium persulfate into the subsurface soil of the subject site (Site). The Site is an active gasoline service station containing three underground storage tanks (USTs).

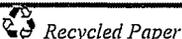
The Site is located within the Los Angeles Coastal Plain Groundwater Basin. According to boring logs and cross section maps, the subsurface lithology of the Site consists of interbedded layers of sandy clay, silty clay, sand and gravel to a depth of approximately 140 feet below ground surface (bgs).

Five soil borings (MW-5 through MW-9) were drilled in February 2002, in the immediate vicinity of the former tank farm to a depth of 105 feet bgs. Soil samples collected from the borings detected TPHg up to 17,000 mg/kg, benzene up to 100 mg/kg, toluene up to 1,100 mg/kg, ethylbenzene up to 500 mg/kg, xylene up to 2,500 mg/kg and MTBE up to 51 mg/kg.

A total of nine groundwater monitoring wells (MW-1 through MW-9) have been installed onsite and/or offsite. Groundwater monitoring has been conducted since May 2003. Historically, up to 130,000 µg/L of TPHg, 150 µg/L of benzene and 120,000 µg/L of MTBE (all in MW-2) were detected in the groundwater. According to a report dated April 15, 2007, up to 5.6 µg/L of MTBE and 38 µg/L of TBA (all in MW-2) were detected in the groundwater in March 2007. Depth to groundwater was measured at approximately 110 feet bgs and the flow direction was toward the southeast.

In a remedial action plan (RAP) dated December 2, 2006, your consultant, Ami Adini & Associates Inc., (AA&A), proposed to conduct a 30-day High Volume Dual Phase Extraction system (HVDPE) to remediate the groundwater and soil at the capillary fringe beneath the Site, and to inject sodium persulfate into the shallow soil 10 to 80 feet bgs to remediate the soil contamination beneath the site. On August 7, 2007, Regional Board staff approved the RAP.

California Environmental Protection Agency



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Mr. Yasser Tabbaa
EDCO Stations, Inc.

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August 14, 2007

Based on our review, Regional Board staff has determined that the proposed discharge meets the conditions specified in 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 the Regional Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of Regional Board Order No. R4-2007-0019, Monitoring and Reporting Program No. CI-9306, and Standard Provisions.

The WDRs issued shall not be rescinded until Regional Board staff determine the WRDs are no-longer needed for the site cleanup.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2007-0019. All monitoring reports shall be sent to the Regional Board, ATTN: Information Technology Unit.

When submitting monitoring or technical reports to the Regional Board, please reference Compliance File No. CI-9306 to ensure that the reports are directed to the appropriate staff. Do not combine other reports with your monitoring reports complying with Order No. R4-2007-0019. 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. A copy of the Order can also be found online at: http://www.waterboards.ca.gov/losangeles/html/permits/gen_orders/R4-2007-0019/R4-2007-0019.pdf

If you have any questions on Order No. R4-2007-0019, please contact Mr. Rodney Nelson at (213) 620-6119. Questions regarding the underground storage tank issues should be forwarded to Mr. Magdy Baiady at (213) 576-6699.

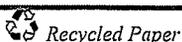
Sincerely,


Deborah J. Smith
Interim Executive Officer

- Enclosures: 1. Board Order No. R4-2007-0019
2. Monitoring and Reporting Program No. CI-9306
3. Standard Provisions

cc: Yvonne Shanks, State Water Resources Control Board, Underground Storage Tank
Cleanup Fund
Frank Comfort, Los Angeles City Fire Department
Ami Adini, Ami Adini & Associates Inc.

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STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. CI-9306
FOR
EDCO STATION
ENROLLMENT UNDER REGIONAL BOARD
ORDER NO. R4-2007-0019
SERIES NO. 028

I. REPORTING REQUIREMENTS

- A. EDCO Station (hereinafter Discharger) shall implement this monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2007-0019.

Monitoring reports shall be received by the due 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

The first monitoring report under this monitoring program is due by October 15, 2007.

- 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 January 30 of each year, beginning January 30, 2008, 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 (WDR).
- D. 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 the WDR. This section shall be located at the front of the report and shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.

E. In addition to the aforementioned requirements, the Discharger shall comply with requirements contained in Section G of Order No. R4-2007-0019 "Monitoring and Reporting Requirements".

II. DISCHARGE MONITORING REQUIREMENTS

The quarterly reports shall contain the following information regarding the injection activities. If there is no injection during any reporting period, the report shall so state:

1. Location map showing injection points.
2. Written summary defining:
 - Depth of injection points;
 - Quantity of the sodium persulfate injected at each injection point; and
 - Total amount of the sodium persulfate injected at the site.
3. Monthly visual inspection at each injection well shall be conducted to evaluate the well casing integrity for a period of three months after each injection. The quarterly report shall include a summary of the visual inspection.
4. To avoid groundwater monitoring network reduction, data bias, and well screen clogging or alteration, no groundwater monitoring wells shall be used as injection points during the proposed sodium persulfate injection. Separate injection points/wells must be installed at the Site for the sodium persulfate proposed injection.

III. GROUNDWATER MONITORING PROGRAM

A groundwater-monitoring program shall be designed to detect and evaluate impacts associated with the injection activities. The monitoring well network must include MW-5 and MW-8 as background wells; MW-2 as source well; and MW-6 and MW-9 as downgradient wells. 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. The Discharger shall conduct a baseline sampling from all monitoring wells (MW-2, MW-5, MW-6, MW-8 and MW-9) one or two weeks prior to the proposed sodium persulfate injection and regular sampling with the required frequencies from all the monitoring wells in the monitoring network for the following constituents:

<u>CONSTITUENT</u>	<u>UNITS</u> ¹	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY OF ANALYSIS</u>
pH ⁴	PH units	Grab	Quarterly ²
Temperature ³	⁰ F	grab	Quarterly ²
Oxidation-reduction potential ³	Milivolts	grab	Quarterly ²

Specific conductivity ³	µmhos/cm	grab	Quarterly ²
Ferrous iron	µg/L	grab	Quarterly ²
Dissolved Oxygen ³	µg/L	grab	Quarterly ²
MTBE	µg/L	grab	Quarterly ²
Tert-Butyl Alcohol (TBA)	µg/L	grab	Quarterly ²
Di-isopropyl Ether (DIPE)	µg/L	grab	Quarterly ²
Ethyl-t-Butyl Ether (ETBE)	µg/L	grab	Quarterly ²
Tert-Amyl-Methyl Ether (TAME)	µg/L	grab	Quarterly ²
Acetone	µg/L	grab	Quarterly ²
Formaldehyde	µg/L	grab	Quarterly ²
Total Petroleum Hydrocarbons as gasoline (TPHg)	µg/L	grab	Quarterly ²
Benzene	µg/L	grab	Quarterly ²
Ethylbenzene	µg/L	grab	Quarterly ²
Toluene	µg/L	grab	Quarterly ²
Total xylenes	µg/L	grab	Quarterly ²
Methane	µg/L	grab	Quarterly ²
Total organic carbon	µg/L	grab	Quarterly ²
Total dissolved solids	mg/L	grab	Quarterly
Sulfate	mg/l	grab	Quarterly
Chloride	mg/L	grab	Quarterly
Boron	mg/L	grab	Quarterly
Carbon dioxide	mg/L	grab	Quarterly
Manganese	µg/L	grab	Quarterly
Total iron	µg/L	grab	Quarterly
Alkalinity	µg/L	grab	Quarterly
Chromium (VI)	mg/L	grab	Quarterly
Total Chromium	mg/L	grab	Quarterly

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

² Quarterly sampling events are required after the first month.

³ Field instrument will be used to test for this constituent.

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. 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)"

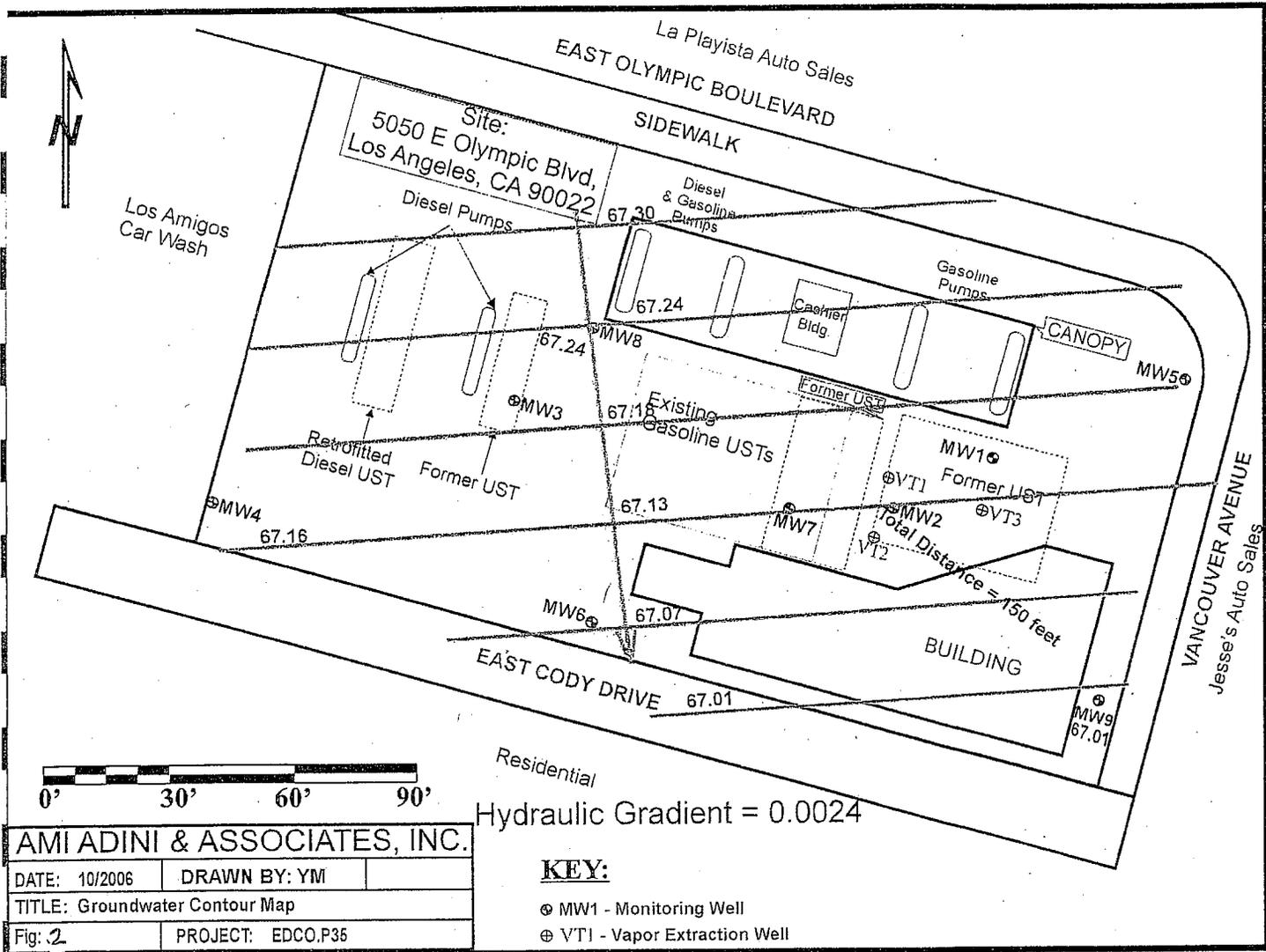
EDCO Station
Monitoring and Reporting Program No. CI-9264

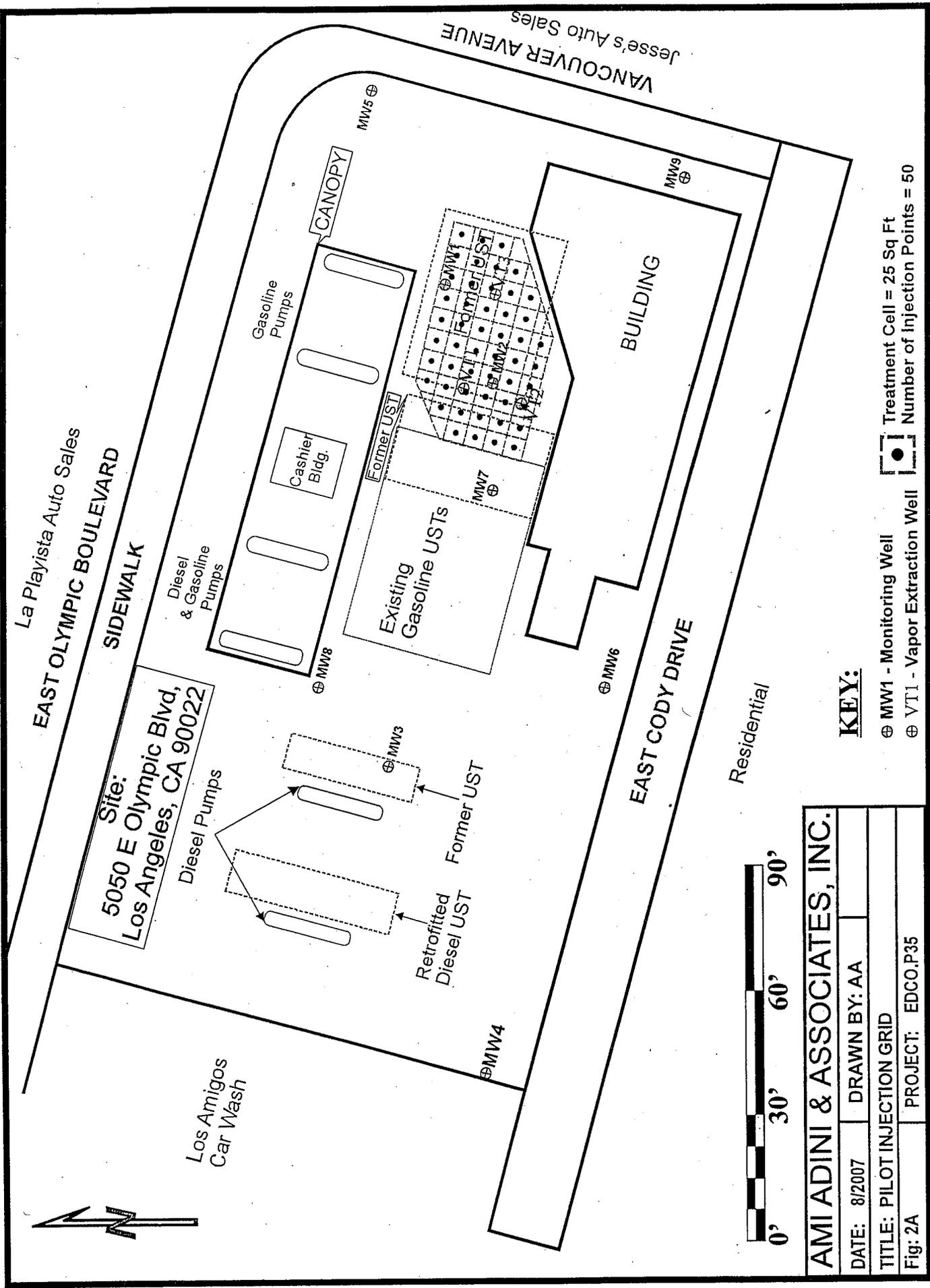
UST File No. R-23866
Order No. R4-2007-0019

All records and reports submitted in compliance with this Order 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.

Ordered by: David A. Beharowski, AEO
Deborah J. Smith
Interim Executive Officer

Date: August 14, 2007





Site:
 5050 E Olympic Blvd,
 Los Angeles, CA 90022

KEY:

- ⊕ MW1 - Monitoring Well
- ⊕ VTI1 - Vapor Extraction Well
- ⊕ MW5
- ⊕ MW6
- ⊕ MW7
- ⊕ MW8
- ⊕ MW9
- (with dot) Treatment Cell = 25 Sq Ft
- (with dot) Number of Injection Points = 50

AMI ADINI & ASSOCIATES, INC.

DATE: 8/2007	DRAWN BY: AA
TITLE: PILOT INJECTION GRID	
Fig: 2A	PROJECT: EDCO.P35