



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

September 28, 2007

Mr. Marc Hermann
HAH Marine Properties
2947 West Fifth Street
Oxnard, CA 93030

**GENERAL WASTE DISCHARGE REQUIREMENTS FOR GROUNDWATER CLEANUP AT
PETROLEUM HYDROCARBON FUEL, VOLATILE ORGANIC COMPOUND AND/OR
HEXAVALENT CHROMIUM IMPACTED SITES
FORMER ROBERT E. MACK PLUMBING
3031 WEST FIFTH STREET, OXNARD
(ORDER NO. R4-2007-0019, SERIES NO. 034; CI NO. 9318)**

Dear Mr. Hermann:

We have completed our review of your application for coverage under the General Waste Discharge Requirements to re-inject treated groundwater and/or inject inorganics/nutrients at the site referenced above in Oxnard, California, for groundwater cleanup and remediation.

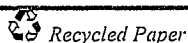
Since April 1991, various subsurface investigations have been conducted at the subject site subsequent to the tank removal, which consisted of drilling and sampling numeral soil borings, installing eleven groundwater monitoring wells. The analytical data from groundwater monitoring event conducted in March 2007 indicated groundwater beneath the site was still impacted by TPHg (up to 8,640 µg/L) and BTEX (up to 1,643 µg/L). The Groundwater flow direction underneath the site was to northwest at a gradient from approximately 0.004 to 0.008 feet/foot.

To remediate groundwater contaminations, you have proposed in the Corrective Action Plan for Remediation of Gasoline-Impacted Soil and Groundwater dated February 8, 2007, to pump-and-treat the contaminated groundwater and re-inject the treated groundwater back into groundwater formation. If further treatment is needed, Fenton's Reagent, which is composed of hydrogen peroxide with trace amount of hydrochloric acid and ferrous sulfate, will be injected into groundwater aquifer via five injection locations on-site.

A letter dated April 10, 2007 from Ventura County Division of Environmental Health approved the Corrective Action Plan.

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

California Environmental Protection Agency



Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.

Hexavalent Chromium Impacted Sites (General WDRs)," adopted by the State Water Resources Control Board on March 1, 2007.

Enclosed are your Waste Discharge Requirements, consisting of General WDRs Board Order No. 2007-0019 and Monitoring and Reporting Program No. CI-9318 and Standard Provisions.

The WDRs issued shall not be rescinded until Ventura County Division of Environmental Health 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 per these requirements, please include a reference to Compliance File No. CI-9318, which 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.

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, please contact Mr. Rod Nelson at (213) 576-6119 or Mr. Gregg Kwey at (213) 576-6702.

Sincerely,


Deborah J. Smith
Interim Executive Officer

Enclosures: 1. Board Order No. R4-2007-0019
2. Monitoring and Reporting Program No. CI-9318

cc: Mr. David Salter, Ventura County Division of Environmental Health
Mr. Emanuel Pedram, AET, Inc.

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
MONITORING AND REPORTING PROGRAM NO. CI-9318
FOR
FORMER ROBERT E. MACK PLUMBING
3031 WEST FIFTH STREET, OXNARD
(TREATED GROUNDWATER RE-INJECTION/INORGANICS/NUTRIENTS INJECTION)
(ORDER NO. R4-2007-0019, SERIES NO. 034)

I. REPORTING REQUIREMENTS

- A. HAH Marine Properties (hereinafter Discharger) shall implement this monitoring program on the effective date of Regional Board Order No. R4-2007-0019. The first monitoring report under this program, for October-December 2007, shall be received at the Regional Board by January 15, 2008. 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. 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

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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 unresolved 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. TREATED GROUNDWATER RE-INJECTION MONITORING REQUIREMENTS

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

1. Location map showing re-injection points used for the treated groundwater. Groundwater monitoring wells shall not be used as re-injection points to avoid reduction of groundwater monitoring network, data bias. Up to two injection points, GRT-1 and GRT-2, are proposed that can be referenced in the attached Plate 8.
2. Written and tabular summary defining the quantity treated groundwater injected per month to the groundwater and a summary describing the days on which the injection system was in operation.

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Treated groundwater	gallons/day	--	• Quarterly

III. INORGANICS/NUTRIENTS INJECTION MONITORING REQUIREMENTS

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

3. Location map showing injection points, IW-1 to -5, used for the inorganics/nutrients (refer to attached Plate 7 for proposed injection locations).
4. Written and tabular summary defining the quantity of inorganics/nutrients injected per month to the groundwater and a summary describing the days on which the injection system was in operation.

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total inorganics/nutrients delivered per injection point	grams/day	--	• Quarterly

IV. GROUNDWATER MONITORING PROGRAM

The Discharger shall conduct groundwater monitoring at the site. Groundwater samples shall be collected from groundwater monitoring wells MW-5 (up-gradient), MW-2 (source area), MW-4 and MW-10 (down-gradient) on a quarterly basis to monitor the effectiveness of the in-situ groundwater remediation (refer to attached Plate 7). Inorganics/nutrients injection points shall not be used as monitoring points. Groundwater shall be monitored for the duration of the remediation in accordance with the following discharge monitoring program:

CONSTITUENT	UNITS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total petroleum hydrocarbons as gasoline (TPHg) and as diesel (TPHd)	µg/L	Grab	• Baseline/Quarterly ¹
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	µg/L	Grab	• Baseline/Quarterly ¹
Methyl tertiary butyl ether (MTBE), Tertiary butyl alcohol (TBA), Tertiary amyl methyl ether (TAME), Di-isopropyl ether (DIPE), ether (ETBE)	µg/L	Grab	• Baseline/Quarterly ¹
Ethanol Formaldehyde Acetone	µg/L	Grab	• Baseline/Quarterly ¹
Total dissolved solids Boron Chloride Sulfate	mg/L	Grab	• Baseline/Quarterly ¹
Oxidation-reduction potential	millivolts		• Baseline/Quarterly ¹
Dissolved Oxygen	µg/L	Grab	• Baseline/Quarterly ¹
Dissolved ferrous iron	µg/L	Grab	• Baseline/Quarterly ¹
Total Chromium and chromium six and Priority Pollutants ²	µg/L	Grab	• Baseline/Quarterly ¹
PH	pH units	Grab	• Baseline/Quarterly ¹
Temperature	⁰ F/ ⁰ C	Grab	• Baseline/Quarterly ¹

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¹ Baseline analysis should be conducted prior to the start of treated groundwater re-injection; and Quarterly thereafter

² The Discharger is required to monitor for total chromium and chromium six and any priority pollutants identified in Attachment I only when they are detected in the baseline test.

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.

V. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted to a less frequent basis or parameters dropped by the Executive Officer if the Discharger makes a request and the Executive Officer determines that the request is adequately supported by statistical trends of monitoring data submitted.

VI. 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)

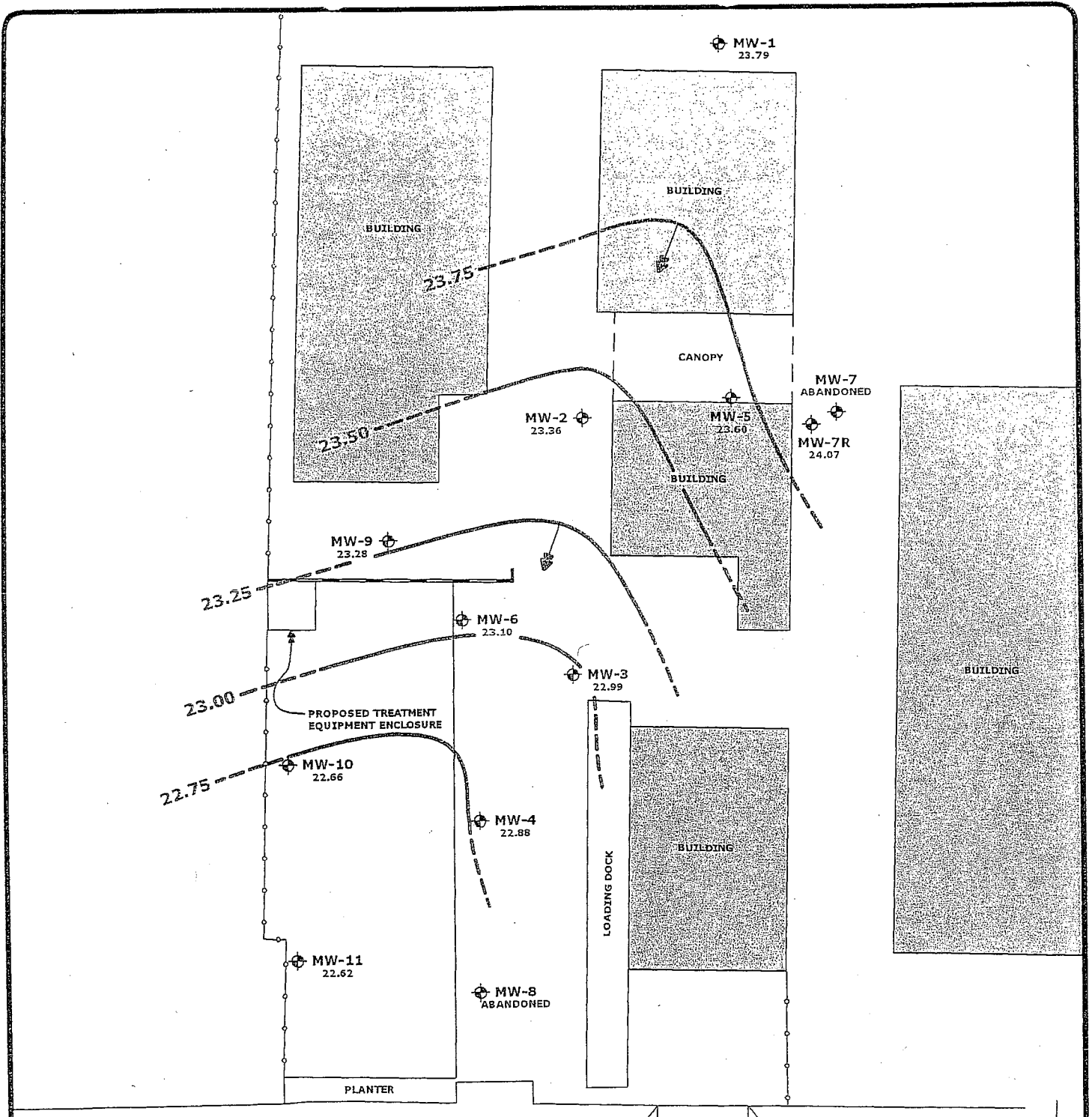
_____ (Title)"

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

Date: September 28, 2007



FIFTH STREET

LEGEND

-  GROUNDWATER MONITORING WELL
-  CONTOUR OF EQUAL GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (FT/MSL)

0' 60'
 PAPER SIZE = 8.5" x 11"
 SCALE - 1" = 60'

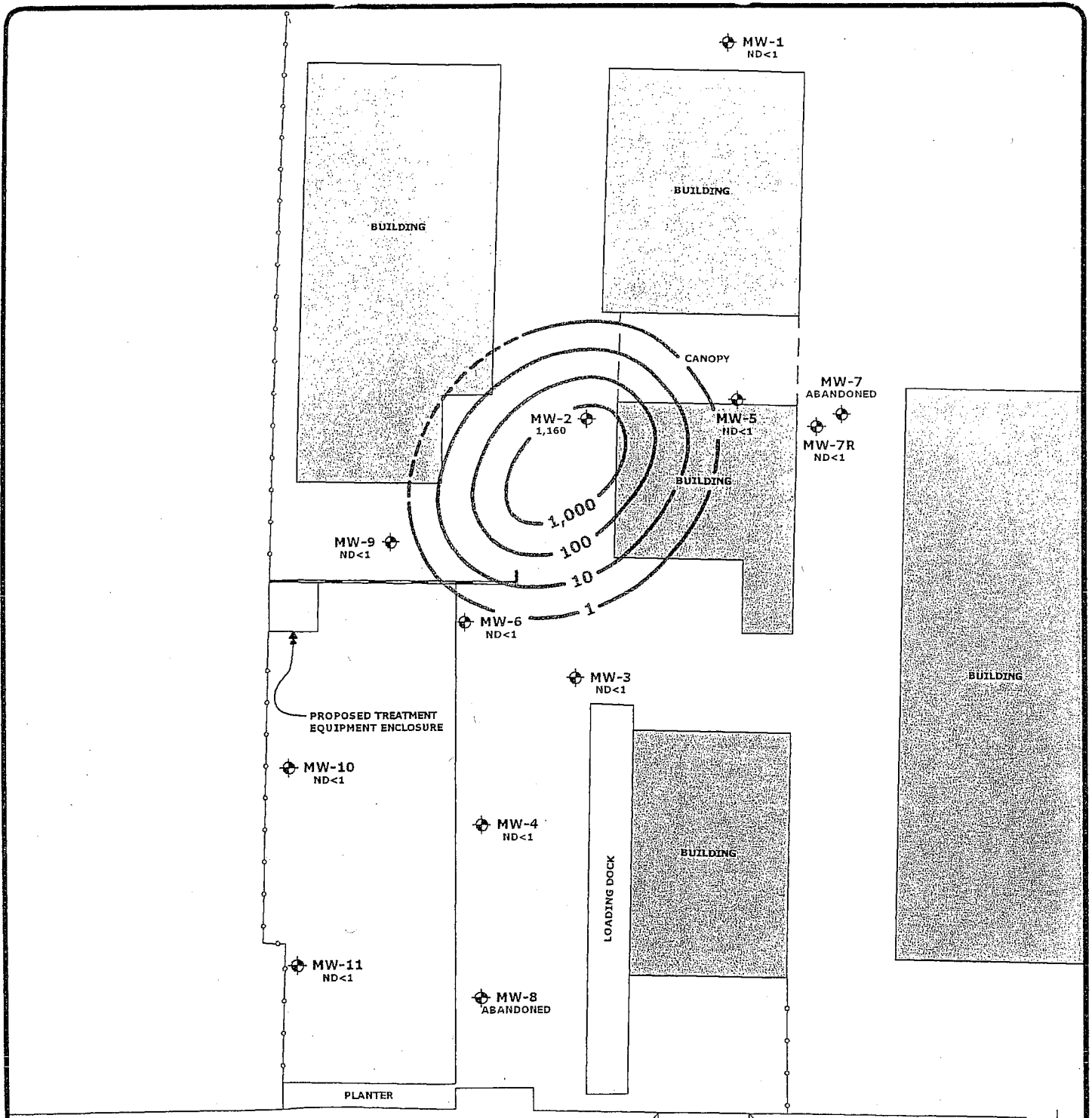
Applied Environmental Technologies, Inc.
 4561 Market Street, Suite B • Ventura, California 93003
 Phone (805)650-1400 Fax (805)650-1576

GROUNDWATER ELEVATION CONTOUR MAP
MARCH, 2007
 3031 WEST FIFTH STREET
 OXNARD, CALIFORNIA

FILE NUMBER 135501AQX MAY 3, 2007



PROJECT
 1355-01

PLATE
 4



FIFTH STREET

LEGEND

-  GROUNDWATER MONITORING WELL
-  CONTOUR OF EQUAL BENZENE CONCENTRATION IN MICROGRAMS PER LITER (µg/L)
- ND NOT DETECTED ABOVE NOTED LABORATORY PRACTICAL QUANTITATION LIMIT (PQL)

0' 60'
 PAPER SIZE = 8.5" x 11"
 SCALE - 1" = 60'

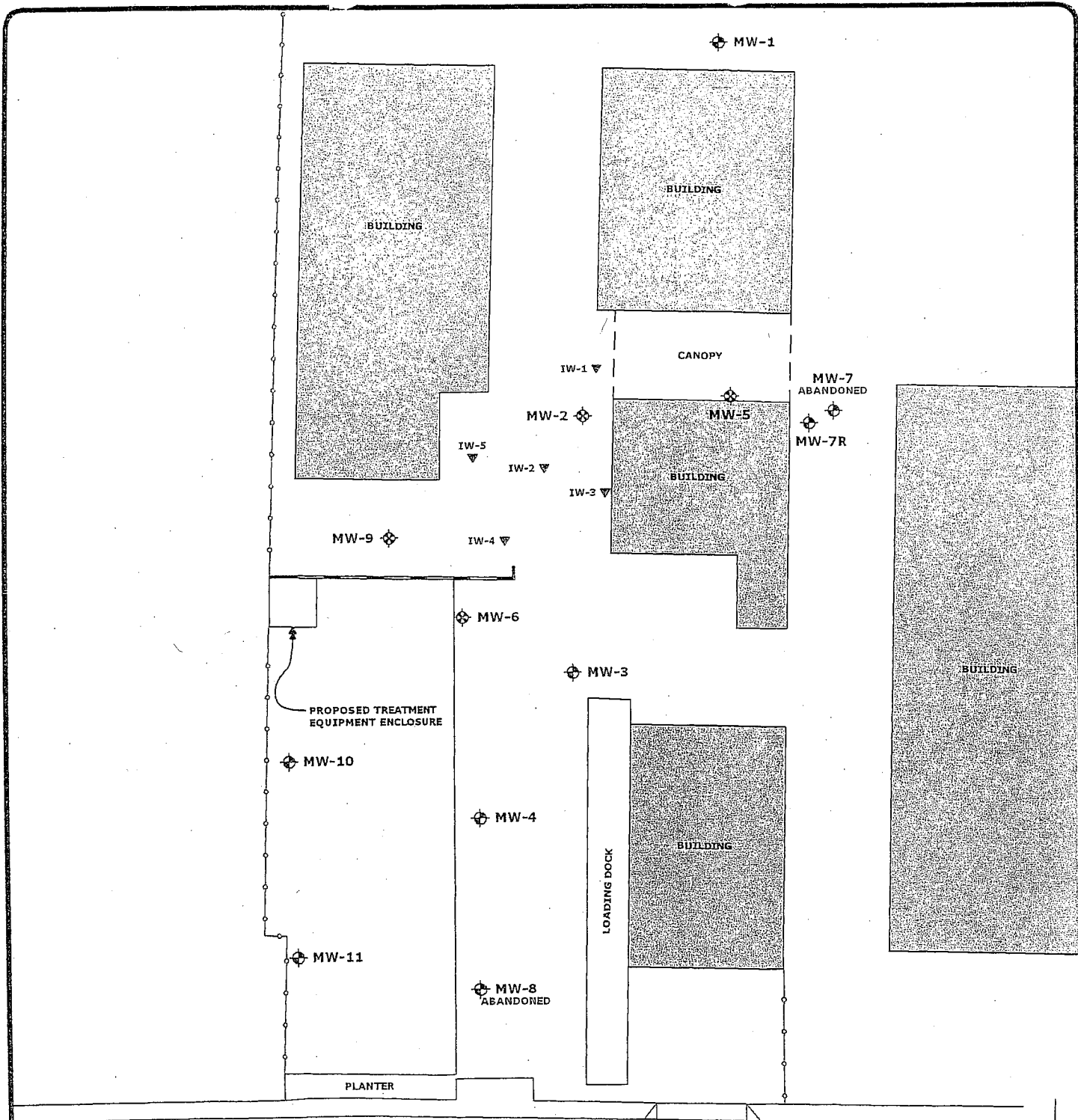
Applied Environmental Technologies, Inc.
 4561 Market Street, Suite B • Ventura, California 93003
 Phone (805)650-1400 Fax (805)650-1576

ISO-CONCENTRATION CONTOUR MAP OF BENZENE IN GROUNDWATER - MARCH, 2007
 3031 WEST FIFTH STREET
 OXNARD, CALIFORNIA

FILE NUMBER 135501AQX MAY 3, 2007

PROJECT 1355-01

PLATE 6



FIFTH STREET

LEGEND

- ⊕ GROUNDWATER MONITORING WELL
- ⊕ MONITORING WELL USED FOR FENTON'S REAGENT INJECTION
- ▽ FENTON'S REAGENT INJECTION WELL

0' 60'
 PAPER SIZE = 8.5" x 11"
 SCALE - 1" = 60'

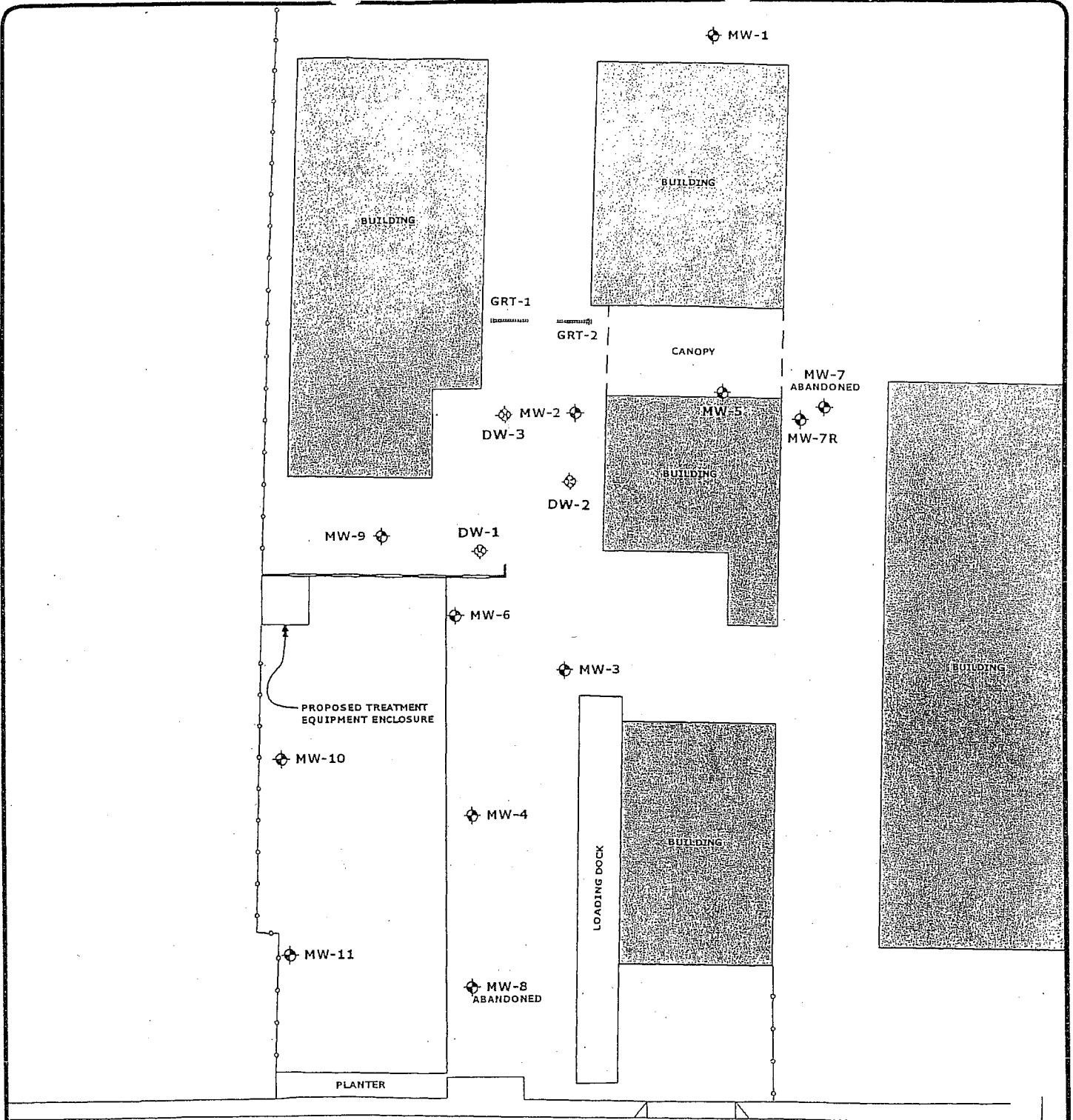
Applied Environmental Technologies, Inc.
 4561 Market Street, Suite B • Ventura, California 93003
 Phone (805)650-1400 Fax (805)650-1576

PROPOSED FENTON'S REAGENT INJECTION WELL LOCATIONS
 3031 WEST FIFTH STREET
 OXNARD, CALIFORNIA

FILE NUMBER 135501AQX | MAY 3, 2007




PROJECT 1355-01

PLATE 7




FIFTH STREET

LEGEND

-  GROUNDWATER MONITORING WELL
-  PROPOSED GROUNDWATER REINJECTION TRENCH
-  DW-1 PROPOSED GROUNDWATER DEWATERING WELL

0' 60'
 PAPER SIZE = 8.5" x 11"
 SCALE - 1" = 60'



Applied Environmental Technologies, Inc.
 4561 Market Street, Suite B • Ventura, California 93003
 Phone (805)650-1400 Fax (805)650-1576

SITE PLAN
 3031 WEST FIFTH STREET
 OXNARD, CALIFORNIA

FILE NUMBER 135501AQX MAY 3, 2007

PROJECT
 1355-01

PLATE
 8