

California RCional Water Quality Control Board

Los Angeles Region



Linda S. Adams Agency Secretary Recipient of the 2001 Environmental Leadership Award from Keep California Beautiful

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November 1, 2006

Mr. Dan Truzzolino ConocoPhillips Company 3611 S. Harbor Boulevard, Ste 200 Santa Ana, CA 927

GENERAL WASTE DISCHARGE REQUIREMENTS COVERAGE FOR PROPOSED OZONE SPARGING TO GROUNDWATER (ORDER NO. R4-2005-0030) (SERIES NO. 060) FORMER TOSCO STATION NO. 6878, 641 WEST SEPULVEDA BOULEVARD, LOS ANGELES, CA (ID# R-24735) (CI NO. 9192)

Dear Mr. Truzzoline:

We have received the document entitled "Application for General Waste Discharge Requirements Permit", dated August 17, 2006, submitted by TRC Inc., on behalf of ConocoPhillips Company (ConocoPhillips), to obtain a permit to operate an ozone sparging system to clean up the groundwater at the subject site.

The site is a former gasoline service station located at 641 West Sepulveda in Carson, California. The former station maintained two 12,000-gallon gasoline underground storage tanks (USTs), one 10,000-gallon diesel UST, and two dispenser islands. In 1999, the station was demolished and all the USTs and dispenser islands were removed. The site is currently a paved parking lot. Contamination was detected in soil during the tank removal and in 2001, petroleum hydrocarbons were detected in groundwater beneath the site. Since 2001, ConocoPhillips' consultant, TRC, installed a total of eight groundwater monitoring wells. Installation of three additional groundwater monitoring wells is in progress to delineate the offsite extent of groundwater contamination.

ConocoPhillips submitted a remedial action plan (RAP) on February 28, 2006. The RAP was approved by the Regional Board staff on March 27, 2006. ConocoPhillips plans to clean up the vadose-zone contamination with an soil vapor extraction system and to clean up the groundwater contamination with an ozone-sparging system. The proposed ozone-sparging system consists of nine proposed sparging points, an ozone generator, conveyance pipings, and monitoring devices.

Regional Board staff have determined that the proposed discharge meets the conditions specified in Regional Board Order No. R4-2005-0030, "General Waste Discharge Requirements for Groundwater Remediation at Petroleum Hydrocarbon Fuel and/or Volatile Organic Compound Impacted Sites," adopted by this Regional Board on May 5, 2005.

Enclosed are Waste Discharge Requirements, Order No. R4-2005-0030, and Monitoring and Reporting Program No. CI-9192.

California Environmental Protection Agency

Mr. Dan Truzzolino ConocoPhillips Company

The "Monitoring and Reporting Program" requires ConocoPhillips to implement the monitoring program on the effective date of this enrollment under Regional Board Order No. R4-2005-0030. ConocoPhillips' first monitoring report is due to this Board two months after the injection. All monitoring reports should be sent to the Regional Board, ATTN: Information Technology Unit.

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When submitting monitoring or technical reports to the Regional Board per these requirements, please include a reference to "Compliance File No. CI-9192," 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. R4-2005-0030 only to the applicant. A copy of the Order will be furnished to anyone who requests it.

If you have any questions, please contact Mr. Rodney Nelson at (213) 620-6119.

Sincerely,

Jonathan **A**. Bishop Executive Officer

Enclosures

Board Order No. R4-2005-0030 Monitoring and Reporting Program No. CI-9190

CC:

Yvonne Shanks, State Water Resources Control Board, Underground Storage Tank Cleanup Fund(w/o Board Order No. R4-2005-0030) Kevin Tucker, TRC

California Environmental Protection Agency

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

MONITORING AND REPORTING PROGRAM NO. CI-9192 FOR FORMER TOSCO STATION NO. 6878 641 WEST SEPULVEDA BOULEVARD, LOS ANGELES (OZONE INJECTION FOR GROUNDWATER CLEANUP) (ORDER NO. R4-2005-0030) (SERIES NO. 060) (FILE NO. R-24735)

REPORTING REQUIREMENTS

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A. ConocoPhillips Company (hereinafter Discharger) shall implement this monitoring program on the effective date (October 23, 2006) of Regional Board Order No. R4-2005-0030. The first monitoring report under this program, for January-March 2007, shall be received at the Regional Board by April 15, 2007. Subsequent monitoring reports shall be received at the Regional Board according to the following schedule:

Monitoring Period

Report Due

April 15

January – March April – June July – September October – December

July 15 October 15 January 15

- 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

October 23, 2006

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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.
 - 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.
 - 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. OZONE INJECTION MONITORING REQUIREMENTS

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

- 1. Location map showing injection points used for the ozone.
- 2. Written and tabular summary defining the quantity of ozone injected per month to the groundwater and a summary describing the days on which the injection system has been operating:
- 3. Depth to groundwater measurement.

CONSTITUENT	UNITS*	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total ozone delivered per injection point	Grams/day		 Bi-weekly for the first month following injection Monthly for the next 3 months Quarterly thereafter

III. GROUNDWATER MONITORING PROGRAM

The Discharger shall sample wells MW-3 and MW-4 in the source area, up-gradient wells MW-1, MW-2, MW-5, MW-6, MW-7 and downgradient well MW-8 (see enclosed figure) to provide groundwater quality information prior to and after the ozone injection. Groundwater from the wells noted above shall be monitored for the duration of the remediation in accordance with the following discharge monitoring program:

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CONSTITUENT	UNITS ¹	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
Total petroleum hydrocarbons as gasoline (TPHg) Total petroleum hydrocarbons as diesel (TPHd)	µg/L	Grab	 1 week before injection Bi-weekly for the first month following injection Monthly for the next 3 months
			Quarterly thereafter
Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)	μg/L	Grab	 1 week before injection Bi-weekly for the first
			 month following injection Monthly for the next 3 months
1	·		Quarterly thereafter
Methyl tertiary butyl ether (MTBE), Tertiary butyl alcohol (TBA), Tertiary amyl methyl	µġ/L	Grab	 1 week before injection Bi-weekly for the first month following injection
ether (TAME), Di-isopropyl ether (DIPE),			 Monthly for the next 3 months
Ethyl tertiary butyl ether (ETBE)			Quarterly thereafter
Ethanol Formaldehyde Acetone	µg/L	Grab	 1 week before injection Bi-weekly for the first month following injection Monthly for the next 3 months
			Quarterly thereafter
Total dissolved solids Chloride Sulfate	Mg/L	Grab	 1 week before injection Bi-weekly for the first month following injection Monthly for the next 3 months Quarterly thereafter
Oxidation-reduction potential	Milivolts		 1 week before injection Bi-weekly for the first month following injection Monthly for the next 3 months Quarterly thereafter

Dissolved Oxygen	μg/L	Grab	1 week before injection
	μ9/Ε		Bi-weekly for the first
			month following injection
			Monthly for the next 3
			months
			Quarterly thereafter
Dissolved ferrous iron	µg/L	Grab	1 week before injection
		F	Bi-weekly for the first
			month following injection
			Monthly for the next 3
, · ·			months
			Quarterly thereafter
Total Chromium and chromium	µg/L	Grab	1 week before injection
six ²			Bi-weekly for the first
			month following injection
			Monthly for the next 3
			months
			Quarterly thereafter
PH	pH units	Grab	1 week before injection
		0.00	Bi-weekly for the first
· · ·	. •		month following injection
			Monthly for the next 3
			months
			Quarterly thereafter
Temperature		Grab	1 week before injection
remperature	F/C		
		ļ	Bi-weekly for the first month following injection
			month following injection
	· ·		Monthly for the next 3
			months
			Quarterly thereafter
	Feet, mean sea	In situ	1 week before injection
Groundwater Elevation	level and below		Bi-weekly for the first
	ground surface		month following injection
			Monthly for the next 3
	•		months
			Quarterly thereafter

¹ µg/l - micrograms per liter ² The Discharger is required to

The Discharger is required to monitor for total chromium and chromium six if total chromium is detected in the baseline samples. The monitoring is required only for the well(s) that the total chromium was detected.

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

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.

V. 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 _____at

(Signature)

(Title)

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Order No. R4-2005-0030

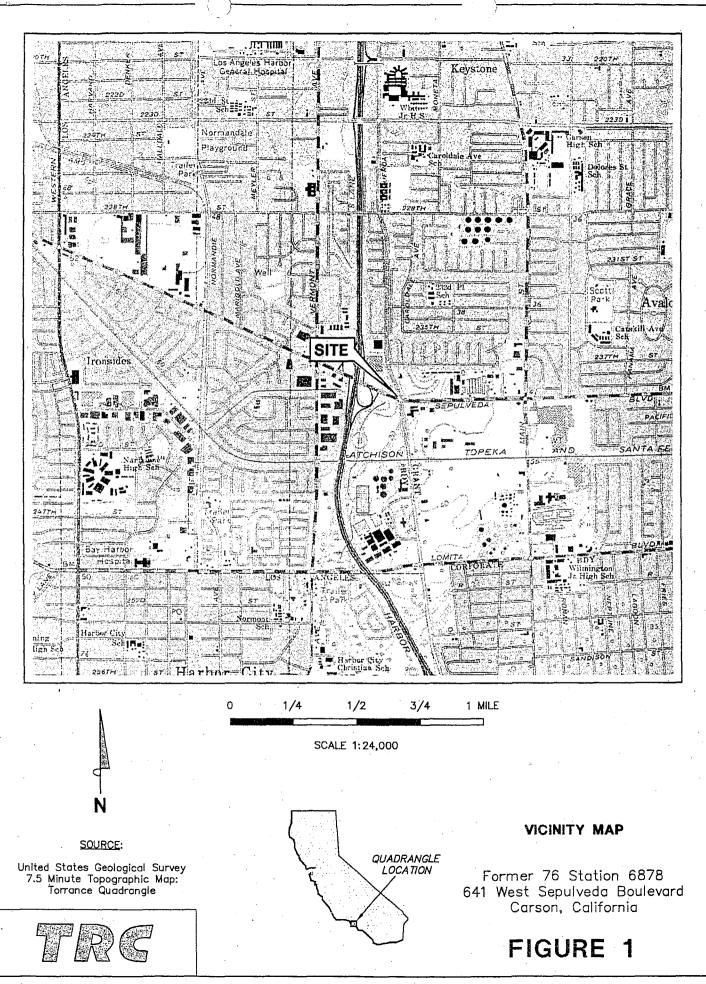
ConocoPhillips Company Former Tosco Station No. 6878 Monitoring & Reporting Program No. CI-9192

VI. PUBLIC DOCUMENTS

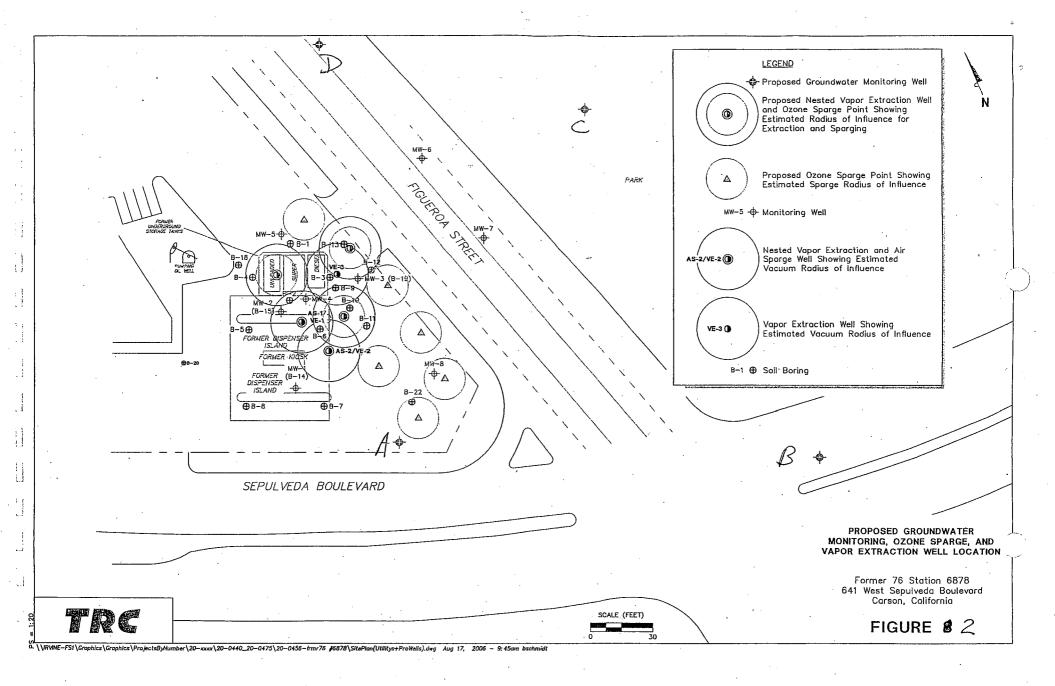
These records and reports are public documents and shall be made available for inspection during normal business hours at the office of the California Regional Water Quality Control Board, Los Angeles Region.

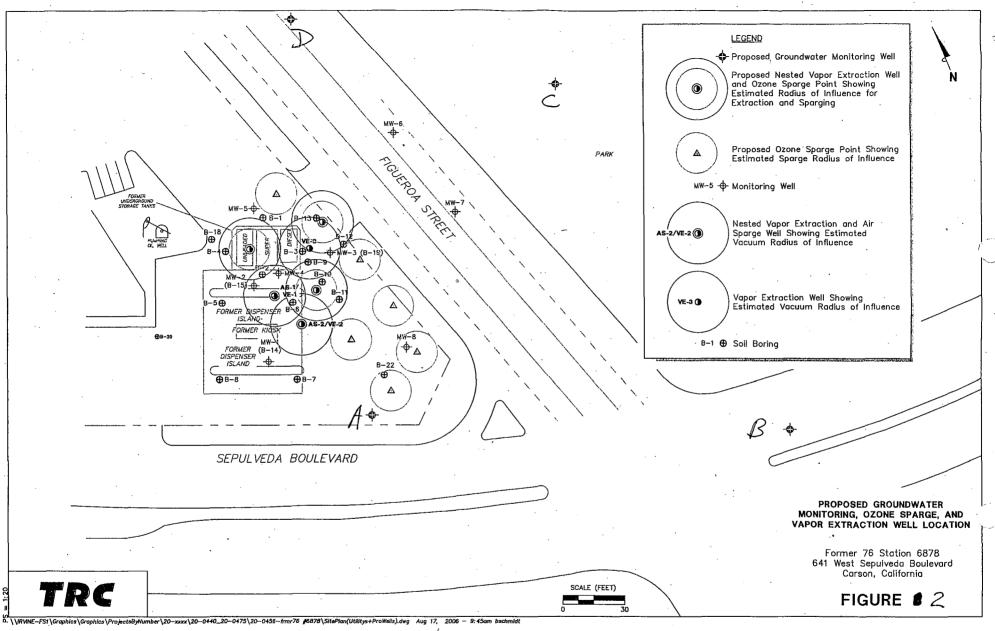
Ordered by: Jonathan S. Bishop **Executive Officer**

Date: October 25, 2006



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