# STATE OF CALIFORNIA

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

#### LOS ANGELES REGION

#### **MONITORING AND REPORTING PROGRAM NO. CI-9406**

FOR

# CONOCOPHILLIPS OIL COMPANY

**76 STATION NO. 3574** 

## **ENROLLMENT UNDER REGIONAL BOARD**

ORDER NO. R4-2007-0019 SERIES NO. 055

#### I. REPORTING REQUIREMENTS

A. Conocophillips 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:

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

Report Due
April 15
July 15
October 15
January 15

The first monitoring report under this monitoring program is due by July 15, 2008.

- 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, 2009, 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.

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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 ozone injected at each injection point; and
  - Total amount of ozone 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 ozone 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 for the upper aquifer zone must include MW-22 as Upgradient well; MW-25 and BC-8 as source wells; and MW-24 and MW-26 as downgradient wells. The monitoring well network for the lower aquifer zone must include MW-20 as source well; and MW-18 and MW-19 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 one or two weeks prior to the proposed ozone injection and regular sampling with the required frequencies from all the monitoring wells in the monitoring network for the following constituents:

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

Specific conductivity <sup>3</sup>	μmhos/cm	grab	Quarterly <sup>2</sup>
Ferrous iron	μg/L	grab	Quarterly <sup>2</sup>
Dissolved Oxygen <sup>3</sup>	μg/L	grab	Quarterly <sup>2</sup>
MTBE	μg/L	grab	Quarterly <sup>2</sup>
Tert-Butyl Alcohol (TBA)	μg/L	grab	Quarterly <sup>2</sup>
Di-isopropyl Ether (DIPE)	μg/L	grab	Quarterly <sup>2</sup>
Ethyl-t-Butyl Ether (ETBE)	μg/L	grab	Quarterly <sup>2</sup>
Tert-Amyl-Methyl Ether (TAME)	μg/L	grab	Quarterly <sup>2</sup>
Acetone	μg/L	grab	Quarterly <sup>2</sup>
Formaldehyde	μg/L	grab	Quarterly <sup>2</sup>
Total Petroleum Hydrocarbons as gasoline (TPHg)	μg/L	grab	Quarterly <sup>2</sup>
Benzene	μg/L	grab	Quarterly <sup>2</sup>
Ethylbenzene	μg/L	grab	Quarterly <sup>2</sup>
Toluene	μg/L	grab	Quarterly <sup>2</sup>
Total xylenes	μg/L	grab	Quarterly <sup>2</sup>
Methane	μg/L	grab	Quarterly <sup>2</sup>
Total organic carbon	μg/L	grab	Quarterly <sup>2</sup>
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
Total Chromium and Chromium (VI) <sup>4</sup>	mg/L	grab	Quarterly
Total dissolved solids, Arsenic, Bromide, Lead, Nickel, Cadmium	mg/L	Grab	Quarterly

 $<sup>^{1}</sup>$  mg/L: milligrams per liter;  $\mu$ g/L: micrograms per liter;  $\mu$ mhos/cm: microohms per centimeter;  $^{\circ}$ F: degree Fahrenheit.

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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	<del> </del>
			(Signature)
			(Title)"

<sup>&</sup>lt;sup>2</sup> Quarterly sampling events are required after the first month of injection.

Field instrument will be used to test for this constituent.

<sup>4.</sup> The Discharger is required to monitor for total chromium and chromium six in the baseline, second and fourth quarterly sampling. If detected at any of these sampling events, the total chromium and chromium six must be monitored quarterly thereafter.

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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:

Tracy J. Egoscue
Executive Officer

Date: May 14, 2008