



Linda S. Adams
Secretary for
Environmental Protection

California Regional Water Quality Control Board San Diego Region

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(858) 467-2952 • Fax (858) 571-6972
<http://www.waterboards.ca.gov/sandiego>



Arnold Schwarzenegger
Governor

RF

In reply refer to:

ORGWU:9UT4190:ebecker

May 20, 2008

Ms. Andrea Wing
Shell Oil Products
20945 Wilmington Avenue
Carson, CA 90810

CERTIFIED MAIL
Registration Number
7007 3020 0001 0040 7171

Mr. Rob Donovan
Tesoro Petroleum Companies Inc.
300 Concord Plaza
San Antonio, TX 78216

CERTIFIED MAIL
Registration Number
7007 3020 0001 0040 7188

Dear Ms. Wing and Mr. Donovan:

**RE: INVESTIGATIVE ORDER NO. R9-2008-0054 FOR PRELIMINARY SITE
ASSESSMENT FOR FORMER SHELL SERVICE STATION ,
25336 MADISON AVENUE, MURRIETA , RIVERSIDE COUNTY**

Enclosed is Investigative Order No. R9-2008-0054, issued pursuant to California Water Code section 13267, requiring you to submit technical reports regarding the investigation and clean-up of the unauthorized release of petroleum hydrocarbons at 25336 Madison Avenue, Murrieta, California. The Order is issued by the California Regional Water Quality Control Board, San Diego Region (Regional Board) to Shell Oil Products, because the records for this case indicate that the company owned and operated the underground storage tanks at the time of the release, and to Tesoro Petroleum Companies, Inc. the current owner/operator of the property.

The enclosed Order directs you to provide the Regional Board with a workplan for a preliminary assessment, a technical report presenting the findings of the preliminary assessment, and quarterly reports for the site referenced above. You are encouraged to review and comply with the specific instructions regarding these reports included in the order. These reports are required under Title 23 of the California Code of Regulations (CCR), Chapter 16 and are necessary to determine if permanent closure of the leaking underground storage tank case is appropriate or if further corrective action is needed.

Ms. Wing & Mr. Donovan
Former Shell Service Station
Murrieta, Riverside County

May 20, 2008

Any person failing or refusing to furnish information required under the authority of California Water Code (CWC) section 13267 or falsifying information submitted to the Regional Board pursuant to such a directive is guilty of a misdemeanor and may be subject to civil liability. Under CWC section 13268, a civil liability may be imposed administratively by the Regional Board in an amount of up to \$1,000 per day of violation (i.e., for each day of delay in submitting all information requested, or for each day that false information remains uncorrected).

As indicated in the Order, you may request an evidentiary hearing before the Regional Board. The Regional Board's Executive Officer may elect to hold an informal hearing or a "paper hearing" in lieu of scheduling a hearing before the Regional Board itself. If you decide to request an evidentiary hearing, send your request the Regional Board, attention: Eric Becker. Such a request must be received within 30 days of the date of this Final Order. Your request must include all comments, technical analysis, documents, reports and any other evidence to support rescission or modification of the Final Order. You are not required to submit documents that are already in the record, which consists of documents and other materials that the Regional Board has previously received regarding this site.

The Executive Officer or Regional Board may deny your request for a hearing after reviewing the evidence. If you do not request an evidentiary hearing, the State Water Resources Control Board (SWRCB) may prevent you from submitting new evidence in support of a SWRCB petition.

A request for an evidentiary hearing, if you submit one, does not stay the effective date of the Final Order, whether or not a hearing is scheduled. A request for a hearing does not extend the 30-day period to file a petition with the SWRCB. However, I recommend that you ask the SWRCB to hold the petition in abeyance while your request for a hearing before the Regional Board is pending. (See, 23 Cal. Code of Regs., § 2050.5(d).) The Final Order includes additional information about SWRCB petitions.

RF

May 20, 2008

Ms. Wing & Mr. Donovan
Former Shell Service Station
Murrieta, Riverside County

If you have any questions regarding the above, please contact Mr. Eric Becker at
(858) 492-1785, or at Ebecker@waterboards.ca.gov.

Respectfully,



MICHAEL P. McCANN
Assistant Executive Officer
San Diego Regional Water Quality Control Board

Enclosure: Investigative Order No. R9-2008-0054

MPM:rwm:esb

cc: Erica J. Rodriguez
Principal Scientist
Wayne Perry, Inc.
8281 Commonwealth Ave.
Buena Park, CA 90621

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

INVESTIGATIVE ORDER NO. R9-2008-0054

SHELL OIL PRODUCTS US
TESORO PETROLEUM COMPANIES INC.
SHELL SERVICE STATION
25336 MADISON AVENUE
MURRIETA, RIVERSIDE COUNTY

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board) finds:

1. **Unauthorized Discharge of Waste:** On April 16-17, 2007, the unauthorized discharge of petroleum related wastes was detected in groundwater at the Shell Service Station, 25336 Madison Avenue, Murrieta, Riverside County.
2. **Parties Responsible for the Discharge:** Shell Oil Products US owned and operated the service station until 2008. On March 21, 2008, Tesoro Petroleum Companies Inc., purchased the service station and is currently owner and operator. (Shell Oil Product US and Tesoro Petroleum Companies Inc. are hereinafter referred to as Dischargers).
3. **California Code of Regulations Chapter 16 Requirements.** California Code of Regulations (CCR) Title 23, Division 3, Chapter 16, Article 11 applies to responsible parties for an underground storage tank whenever there is any reportable unauthorized release. Applicable requirements of Chapter 16 including the following:
 - a. Section 2652 (d) requires submission of reports to the local agency or Regional Water Quality Control Board every three months until investigation and cleanup are complete.
 - b. Section 2654 requires that in the event of an undocumented release, an initial site characterization is performed, providing data including the nature and estimated quantity of the release; water quality, use and approximate locations of wells potentially affected by the release.
 - c. Section 2722 (c) requires the responsible party to submit a workplan for Proposed activities under the Preliminary Site Assessment Phase, if directed by the regulatory agency.
 - d. Section 2723 specifies that the Preliminary Site Assessment Phase includes the initial site characterization specified in Section 2654 and reporting must be conducted according to Section 2562.

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4. **Groundwater Investigation:** The results of this investigation are contained in the technical report entitled, Phase II Environmental Site Assessment Report dated May 10, 2007, which was prepared by URS Corporation. The following table displays the maximum groundwater concentrations of total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d), Methyl-t-Butyl Ether (MTBE), Tert-Amyl-Methyl Ether (TAME), and Tert-Butyl Alcohol (TBA) presented in the report, which was detected in the groundwater grab samples:

<i>Constituent</i>	<i>Maximum Groundwater Concentration ($\mu\text{g/L}$)¹</i>
TPH-g	380
TPH-d	160
MTBE	1,600
TAME	4.3
TBA	640

A discharge of waste from the onsite underground storage tank (UST) system is a potential source of the elevated concentrations of the constituents in the above table.

5. **Cleanup Levels:** The *Water Quality Control Plan, San Diego Basin (9)* (Basin Plan) was adopted by this Regional Board on September 8, 1994, and subsequently approved by the State Board. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan includes criteria for determining appropriate soil and groundwater cleanup levels for protection of both human health and the environment.
6. **Necessity of Reporting.** A Soil and Groundwater Investigation is required to comply with Title 23 CCR Section 2724 (23 CCR 2724). Based upon the data presented in the Phase II Environmental Site Assessment Report, further action is necessary to address impacts of the illicit discharge to waters of the State. The Dischargers have not provided documentation of a Soil and Groundwater Investigation, Site Conceptual Model, Quarterly Groundwater Monitoring, or any further quarterly updates. Consequently, the information in the record for this case is insufficient to determine the nature and quantity of the release or determine if the release poses a threat to human health or the environment. The workplan for the Soil and Groundwater Investigation is required pursuant to

¹ *Baseline Subsurface Investigation Report, December 18, 1997*, prepared by Secor International.

Section 2724 and 2725, to allow regulatory review of the proposed activities. Quarterly reporting is required pursuant to Section 2652 (d).

7. **Regulatory Authority.** California Water Code section 13267 provides that the Regional Board can require any person who has discharged, discharges, proposes to discharge or is suspected of discharging waste to furnish, under penalty of perjury, technical or monitoring program reports which the Regional Board requires. The burden, including the costs of preparing the reports, must bear a reasonable relationship to the need for and the benefits to be obtained from the reports. These findings provide the Discharger with a written explanation with regard to the need for the reports and identify the evidence that supports the requirement to submit the reports. The costs of these reports are estimated in the Underground Storage Tank Cleanup Fund Cost Guidelines and are reasonable costs. Costs for a Soil and Groundwater Investigation Workplan range from \$1,400 to \$2,755, for a Soil and Groundwater Investigation Report range from \$2,275 to \$5,620, for a Site Conceptual Model range from \$720 to \$950, and for a Quarterly Groundwater Monitoring Report range from \$1,790 to \$2120. The associated costs bear a reasonable relationship to the need for the actions, specifically the protection of water quality and beneficial uses.²
8. **Qualified Professionals.** Discharger reliance on qualified professionals promotes proper planning, implementation, and long-term cost-effectiveness of investigation, and cleanup and abatement activities. Professionals should be qualified, licensed where applicable, and competent and proficient in the fields pertinent to the required activities. California Business and Professions Code Sections 6735, 7835, and 7835.1 require that engineering and geologic evaluations and judgments be performed by or under the direction of registered professionals.

IT IS HEREBY ORDERED, pursuant to section 13267 of the California Water Code, that the Dischargers must submit the following technical reports:

A. REPORTS

1. **Soil and Groundwater Investigation Workplan:** The Dischargers shall develop and submit to the Regional Board by **August 1, 2008**, a workplan designed to collect information to produce the Site Investigation Report described in Directive 2.

² See Underground Storage Tank Cleanup Fund Cost Guidelines California State Water Resources Control, October 2001
http://www.waterboards.ca.gov/water_issues/programs/ustcf/technicalformsinfo.shtml

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a. Investigation Components

1. identify all waste constituents from the discharge and the horizontal and vertical extent of the waste constituents;
2. assess the vertical and horizontal extent of waste constituents to background conditions in both the groundwater and soil (may necessarily include both on and off property areas affected by the discharge of wastes);
3. characterize the geology and hydrogeology of the Site with respect to those factors affecting the transport and environmental persistence of pollutants; and
4. determine the source(s), and nature of the discharge in the subsurface, and evaluate the impacts of the wastes/waste related constituents upon all existing and future receptors that could be affected by the waste.

b. Report Completion Schedule Include a schedule for the completion of all activities and submission of a final Soil and Groundwater Investigation Report.

c. Regional Board Notification Provide for Regional Board notification at least one week before the start of fieldwork.

2. **Soil and Groundwater Investigation Report:** Prepare and submit a complete Soil and Groundwater Investigation Report, within **sixty (60 days)** of concluding the field investigation. The report shall contain the following information:

- a. Source Characterization The report shall contain the results of an investigation of all potential sources of waste constituent discharges to soil and groundwater including, but not limited to, historical records of operations, site reconnaissance, and previous sampling studies. The information in the technical report must provide an adequate basis for determining subsequent cleanup and abatement actions. All sources of waste constituent releases shall be located on a site map at a scale of 1 inch = 200 feet or larger, with an appropriate contour interval to depict site topography.
- b. Geologic Characterization The report shall contain an accurate characterization of the subsurface geology, the hydrogeologic characteristics, and all preferential pathways that may affect groundwater flow and contaminant migration.
- c. Groundwater Flow Characterization The report shall describe the rate(s) and direction(s) of local groundwater flow, in both the horizontal and

vertical dimension for all water bearing units potentially affected by the waste constituent(s) from the Site.

- d. Extent of Waste Constituent Characterization The report must adequately characterize the extent (both laterally and vertically) of each waste constituent in soil and groundwater to the background³ concentration for that waste constituent, and include any pollution that has migrated off-property.
- e. Groundwater Monitoring Wells The report shall describe the location of existing monitoring wells, and the proposed location of additional monitoring wells, needed to characterize the types of waste constituents present, the concentrations of waste constituents, and their lateral and vertical extent in groundwater. Selected methods for purging and sampling monitoring wells must be capable of providing representative samples of groundwater for detecting all of the waste constituents.
- f. Field Methodologies The report shall describe the field methodologies used for drilling, soil sampling, groundwater sampling, well and piezometer construction, geophysical surveys, and other activities.
- g. Chemical Analyses The report shall describe the laboratory analytical methods and protocols used for each environmental medium including soil, soil vapor, and water. The suite of chemical analyses, methods and protocols must be adequate to quantitatively identify and characterize the full range of site-specific waste constituents.
- h. Sample Locations and Number The locations, type, and number of samples shall be identified and shown on a site map and cross sections. The number of samples and suite of chemical analyses must be sufficient to identify the nature of waste constituent(s) and their sources, to define the distribution of waste constituents in the subsurface, to provide data for evaluation of fate and transport of pollutants, risk assessment, remedy selection, and remedial design. In addition samples shall be collected to evaluate physical properties of soils and aquifer materials. All sample data shall be presented in tabular format including the sample result, sample medium, location, depth, sampling method, analyses and rationale for the method.

3. Site Conceptual Model: Within 60 days of submitting the Soil and Groundwater Investigation Report, the Dischargers shall submit a site conceptual model

³ Background" means the concentrations or measures of constituents or indicator parameters in water or soil that have not been affected by waste constituents from the site.

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(SCM) that provides a written or pictorial representation of the release scenario and the likely distribution of waste at the site, as well as potential pathways and receptors. The SCM must identify and describe the types of wastes present including their distribution in space and time, and how the wastes are changing in space and time. In addition the SCM must identify the potential, current and future receptors in the area; link potential sources to potential receptors through transport of wastes in the air, soil and water; and identify the fate and transport characteristics of the site. It should describe or show the physical characteristics and properties of the subsurface and identify the environmental issues that need to be investigated (and those issues that do not need to be addressed). The SCM must include data interpretations, a discussion of the level of uncertainty of conclusions, outline data gaps remaining in the conceptual model, and describe the additional work needed to fill identified data gaps and make recommendations for the next phase of the cleanup.

4. **Groundwater Monitoring Reports:** The Dischargers must submit quarterly groundwater monitoring reports commencing with a quarterly report due on **October 30, 2008** with subsequent reports submitted no later than 30 days following the end of the quarter according to the following schedule:

Monitoring Period	Due Date for Report
First Quarter (Jan-Mar)	Due no later than April 30
Second Quarter (Apr-Jun)	Due no later than July 30
Third Quarter (Jul-Sep)	Due no later than October 30
Fourth Quarter (Oct-Dec)	Due no later than January 30

The quarterly groundwater monitoring reports must include:

- a. Transmittal Letter with Penalty of Perjury Statement The transmittal letter must discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter must be signed by the Dischargers' principal executive officers or their duly authorized representative, and must include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
- b. Groundwater Elevations Measurements of groundwater elevation from all wells must be presented in tabular format with depth to groundwater (in feet below ground surface), top of casing elevations, depths to the top of well screens, length of well screens and total depth for each well included in the monitoring program. For all wells containing floating "free

petroleum product" (A.K.A. light non-aqueous phase liquid or LNAPL) include the measured thickness of LNAPL in a tabular format. A groundwater elevation map must be prepared for each monitored water-bearing zone with the groundwater flow direction and calculated hydrologic gradients(s) clearly indicated in the figures(s). A complete tabulation of historical groundwater elevations must be included in the fourth quarterly report each year.

- c. Groundwater Results Groundwater samples from all wells must be collected and analyzed quarterly using EPA methods 8015 for total petroleum hydrocarbons quantifying gasoline and diesel and EPA method 8260 for volatile organic compounds including benzene, toluene, ethylbenzene, xylenes, methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA) and all other fuel oxygenates, with sampling data presented in tabular format. Isoconcentration map(s) must be prepared for constituents of concern (COCs) for each monitored water-bearing zone, as appropriate. Time versus concentration plots and distance versus concentration plots that also show groundwater elevations must be prepared for constituents of concern for appropriate wells.
- d. Site Plot Plan Provide a site plot plan which:
1. clearly illustrates the locations of monitoring wells, former/current underground storage tank systems (and product piping) and buildings located on the property and immediately adjacent to the property lines of the site, and
 2. identifies the most recent concentrations of total petroleum hydrocarbons and volatile aromatic hydrocarbons (e.g. benzene, toluene, ethylbenzene, total xylenes, MTBE, TBA and other fuel oxygenates).
- e. Technical Interpretation The report must provide technical interpretations of the groundwater data, and describe any significant increases in pollutant concentrations since the last report, any measures proposed to address the increases, any changes to the site conceptual model, any conclusions and recommendations for future action with each report.
- f. Analytical Methods The report must describe analytical methods used, detection limits obtained for each reported constituent, and a summary of QA/QC data.

- g. Sample Collection Information The report must indicate sample collection protocol(s), describe how investigation derived wastes are managed at the site, and include documentation of proper disposal of contaminated well purge water and/or soil cuttings removed from the site.
- h. Historical Groundwater Data Historical groundwater sampling results must be listed in tabular form and included in the fourth quarterly report each year.

B. PROVISIONS

1. **Contractor/Consultant Qualifications:** All reports, plans and documents required under this Order shall be prepared under the direction of appropriately qualified professionals. The lead professional performing engineering and geologic evaluations and judgments shall sign and affix their professional geologist or civil engineering registration stamp to all technical reports, plans or documents submitted to the Regional Board.
2. **Laboratory Qualifications:** All samples must be analyzed by California State-certified laboratories using approved EPA methods for the type of analysis to be performed. All laboratories must maintain quality assurance/quality control (QA/QC) records for Regional Board review.
3. **Reporting of Changed Owner or Operator:** The Dischargers must notify the Regional Board of any changes in site occupancy or ownership associated with the property described in this Order.
4. **Penalty of Perjury Statement.** All reports must be signed by the Dischargers' *principal executive officers or their duly authorized representative*, and must include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.
5. **Electronic Data Submittals:** All information submitted to the Regional Board in compliance with this Order in paper copy format is also required to be submitted electronically via the Internet into the GeoTracker database. To comply with state regulations,⁴ your update to the Geotracker database must include the following minimum information:
 - a. Data generated after the effective date of the regulations by chemical analysis of soil, vapor, or water samples (including surface water,

⁴ 23 CCR 3893

groundwater and influent/effluent water samples from remediation systems), shall be submitted in Electric Data File (EDF) format.

- b. The latitude and longitude of any permanent monitoring well for which data is reported in EDF format, accurate to within 1 meter and referenced to a minimum of two reference points from the California Spatial Reference System (CSRS-H), if available.
- c. The surveyed elevation relative to a geodetic datum of any permanent monitoring well.
- d. The elevation of groundwater in any permanent monitoring well relative to the surveyed elevation.
- e. A site map or maps showing the location of all sampling points referred to in the report.
- f. The depth to the screened interval and the length of screened interval for any permanent monitoring well.
- g. Boring logs, in PDF format.
- h. A complete copy of the report, in PDF format, which includes the signed transmittal letter and professional certification.

The GeoTracker website address is <http://www.geotracker.waterboards.ca.gov>.
Deadlines for electronic submittals coincide with deadlines for paper copy submittals.

Dated this 20 day of May 2008

BY THE EXECUTIVE OFFICER



MICHAEL McCANN
Assistant Executive Officer

Signed pursuant to the authority
delegated by the Executive
Officer to the Assistant Executive
Officer

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Order No. R9-2008-0054
Shell Service Station
Murrieta, Riverside County

- 10 -

May 20, 2008

NOTIFICATIONS

Failure to comply with the requirements of this order may subject you to enforcement action, including but not limited to: imposition of administrative civil liability under CWC Section 13268 or referral to the attorney general for injunctive relief or civil or criminal liability

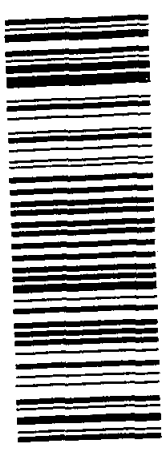
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 Street, Apt. No., or PO Box No. 20945 Wilmington Avenue
 City, State, ZIP+4 Carson, CA 90810
 PS Form 3800, August 2006 See Reverse for Instructions

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Ms. Andrea Wing
Sheilail Practicists
20945 Wilmington Avenue
Carson, CA 90810

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 Addressee

B. Received by (Printed Name) C. Date of Delivery

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 Registered Return Receipt for Merchandise
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2. Article Number (Transfer from service label) 7007 3020 0001 0040 7171

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1. Article Addressed to:

Mr. Bob Donovan
 Records Petroleum Companies
 300 Concord Plaza
 San Antonio, TX 78216

2. Article Number

(Transfer from service label)

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A. Signature

X

- Agent
- Addressee

B. Received by (Printed Name)

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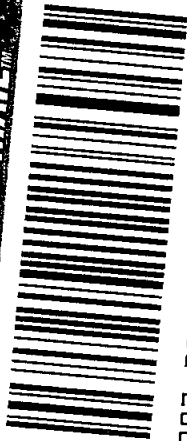
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PS Form 3811, February 2004

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Sent To Mr. Bob Donovan
 Street, Apt. No., or PO Box No. 300 Concord Plaza
 City, State, ZIP+4 San Antonio TX 78216

PS Form 3800, August 2006 See Reverse for Instructions