AUG 1 6 2017

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Certified Mail
7005 2570 0001 6436 6136

Mr. Tom Rizzo
Shell Oil Products US, Martinez Refinery
PO Box 711
Martinez, California 94553

RE: **Notice of Potential Enforcement Action for Apparent Violations of Section 112(r)(7) of the Clean Air Act, Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act, Section 304 of the Emergency Planning and Community Right-to-Know Act, Section 3008(a) of the Resource Conservation and Recovery Act, and Section 311 of the Clean Water Act**

Dear Mr. Rizzo:

This letter is to notify you that the U.S. Environmental Protection Agency ("the EPA" or "the Agency") is preparing to bring a civil administrative action against Equilon Enterprises LLC d/b/a Shell Oil Products US (the "Company") to ensure compliance and assess penalties, at its facility located at 3485 Pacheco Boulevard, Martinez, California, 94553. The allegations being considered include violations of Section 112(r)(7) of the Clean Air Act ("CAA"), 42 U.S.C. § 7412(r)(7) and the Risk Management Program ("RMP") requirements promulgated thereunder at 40 C.F.R. Part 68; Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), as amended, 42 U.S.C. § 9603; Section 304 of the Emergency Planning and Community Right-to-Know Act ("EPCRA"), 42 U.S.C. § 11004; Section 3008(a) of the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. §§ 6921-6939e; and Section 311 of the Clean Water Act ("CWA"), 42 U.S.C. § 1321. This action is for violations discovered during routine compliance evaluation inspections performed November 17-20, 2014 (CAA, CERCLA, EPCRA), March 23-27 and 30, 2015 (RCRA) and November 15, 2016 (CWA).

Specifically, as previously communicated to the Company, EPA is considering the following allegations:

1. Failure to analyze and report in its RMP a release from the worst-case release scenario ("WCS") in violation of CAA Section 112(r)(7) and 40 C.F.R. § 68.25;
2. Failure to ensure the Piping and Instrumentation Diagrams ("P&IDs") accurately reflect the design of a covered process as installed in the field, in violation of CAA Section 112(r)(7) and 40 C.F.R. § 68.65(d)(ii);



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3. Failure to immediately notify the National Response Center ("NRC") of a release of sulfuric acid above the applicable Reportable Quantity ("RQ") on December 14, 2013, in violation of CERCLA Section 103 and 40 C.F.R. § 302.6;

4. Failure to immediately notify the California Office of Emergency Services ("CalOES") of a release of sulfuric acid above the applicable RQ on December 14, 2013, in violation of EPCRA Section 304 and 40 C.F.R. §§ 355.33 - 355.43;

5. Failure to make a waste determination for spent paint wastes at the paint shop and wastewater/stormwater streams discharging into surface impoundments, in violation of RCRA Section 3008(a) and 22 CCR § 66262.11 [40 C.F.R. § 262.11];

6. Storage and treatment of hazardous wastes generated from its Quality Assurance Laboratory, Crack Product Field Laboratory, Heat Exchanger Bundle and paint shop without a permit, in violation of RCRA Section 3008(a) and 22 CCR § 66270.1(c) [40 C.F.R. § 270.1(c)];

7. Failure to minimize the release of hazardous waste carbon monoxide boiler ("COB") fly ash (K048 and D010) at the bag house area near the COBs, in violation of RCRA Section 3008(a) and 22 CCR § 66265.31, as referenced by § 66262.34(a)(4) Maintenance and Operation of Facility [40 C.F.R. § 265.31, as referenced by § 262.34(a)(4)];

8. Failure to transport a full satellite accumulation container within three days of being filled to the facility's less than 90-day accumulation area, in violation of RCRA Section 3008(a) and 22 CCR § 66262.34(e)(3) [40 C.F.R. § 262.34(c)(2)];

9. Failure to comply with the required container management standards for hazardous waste generators, in violation of RCRA Section 3008(a) and 22 CCR §§ 66262.34(a)(1)(A); 66262.34(a)(2); 66262.34(a)(3); 66265.173(a) [40 C.F.R. §§ 262.34(a)(2); 262.34(a)(3); 265.173(a)];

10. Improper use of a 6400-gallon mobile refueler tank, in violation of CWA Section 311 and 40 C.F.R. Part 112 (Spill Prevention, Control, and Countermeasure Requirements); and

11. Failure to utilize the correct volume of the largest aboveground storage container at the facility for determining the worst-case discharge ("WCD") volume for response planning purposes, in violation of CWA Section 311 and 40 C.F.R. Part 112 (Facility Response Plan Requirements).

Before filing a Determination of Violation, Compliance Order, and Notice of Right to Request a Hearing ("Complaint"), EPA is extending to you the opportunity to advise EPA of any other information that we should consider. Relevant information may include any evidence of your reliance on compliance assistance, additional compliance tasks performed subsequent to the investigation, or financial factors bearing on your ability to pay a civil penalty.

Your response to this letter must be made by a letter, signed by a person or persons duly authorized to represent the Company. Please send your response by certified mail, return receipt requested, addressed to:

Rebekah Reynolds (ORC-3)



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Assistant Regional Counsel
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco CA 94105

Please provide any information that EPA should consider so that it is *received by* September 15, 2017. EPA anticipates filing a Complaint in this matter on or about September 15, 2017, unless the Company first advises EPA, with supporting information, of substantial reasons not to proceed as planned.

Even if you are unaware of any mitigating or exculpatory factors, we are extending to you the opportunity to commence settlement discussions concerning the above-described violations. Any penalty discussed in settlement negotiations for violations of the CAA and its implementing regulations will be calculated pursuant to EPA's June 2012 "Combined Enforcement Policy for Clean Air Act Sections 112(r)(1), 112(r)(7), and 40 CFR Part 68."[1] Any penalty discussed in settlement negotiations for violations of CERCLA, EPCRA, and their respective implementing regulations will be calculated pursuant to EPA's "Enforcement Response Policy for Sections 304, 311, and 312 of the Emergency Planning and Community Right-to-Know Act and Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act."[2] Any penalty discussed in settlement negotiations for violations of RCRA, and its implementing regulations, will be calculated pursuant to EPA's June 2003 "RCRA Civil Penalty Policy."[3] Finally, any penalty discussed in settlement negotiations for violations of the CWA and its implementing regulations will be calculated pursuant to EPA's 1998 "Penalty Policy for Sections 311(b) and (j) of the Clean Water Act."[4] These penalty policies are subject to inflation adjustments under the applicable Civil Monetary Penalty Inflation Adjustment Rule, as well as potential changes in EPA guidance. Also, civil penalties may be mitigated under the EPA "Supplemental Environmental Projects Policy,"[5] which describes the terms under which a commitment to perform an environmental project may mitigate, in part, a civil penalty.

Please note that, pursuant to regulations located at 40 C.F.R. Part 2, Subpart B, you are entitled to assert a business confidentiality claim covering any part of the submitted information as defined in 40 C.F.R. § 2.201(c). Asserting a business confidentiality claim does not relieve you from the obligation to respond fully to this letter. Failure to assert such a claim makes the submitted information subject to public disclosure upon request and without further notice to you, pursuant to the Freedom of Information Act, 5 U.S.C. § 552. Information subject to a business confidentiality claim may be available to the public only to the extent set forth in the above-cited regulation. EPA has authority to use the information requested herein in an administrative, civil, or criminal action.

Enclosed for your information are requirements of the Securities and Exchange Commission (SEC) for "registrants" to provide information on environmental legal proceedings to the public. To determine the applicability of these requirements to your company you should seek competent legal counsel as described in the enclosed SEC Notice.

EPA encourages the Company to explore the possibility of settlement. If you are interested in commencing settlement negotiations or have any questions regarding this notice, please have your

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[1] https://www.epa.gov/sites/production/files/documents/112rcep062012.pdf
[2] https://www.epa.gov/sites/production/files/documents/epcra304.pdf
[3] https://www.epa.gov/sites/production/files/documents/rcpp2003-fnl.pdf
[4] http://www.epa.gov/sites/production/files/documents/311pen.pdf
[5] https://www.epa.gov/sites/production/files/2015-04/documents/sepupdatedpolicy15.pdf



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counsel contact Rebekah Reynolds, Assistant Regional Counsel, at (415) 972-3916 or reynolds.rebekah@epa.gov, to schedule a meeting or conference call. For questions regarding RCRA, please contact Sharon Lin at 415-972-3446 or lin.sharon@epa.gov. For questions regarding CWA SPCC, please contact Janice Witul at (415) 972-3089 or witul.janice@epa.gov. For questions regarding CWA FRP, please contact Peter Reich at (415) 972-3052 or reich.peter@epa.gov. Finally, for questions regarding CAA, EPCRA and CERLCA, please contact Donald Nixon at (415) 972-3123, or nixon.donald@epa.gov. We thank you in advance for your cooperation.

Sincerely,

Elizabeth Berg
Acting Assistant Director
Enforcement Division

Joel Jones
Assistant Director
Enforcement Division

Daniel Meer
Assistant Director
Superfund Division

Enclosures:

Notice of SEC Registrants' Duty to Report

cc (via certified mail return receipt requested):

Shell Oil Products US
P.O. Box 4453
Houston, TX 77210

Equilon Enterprises LLC
910 Louisiana Street, Suite 2
Houston, TX 77002

CT Corporation System (C0168406)



ED_001593_00021681

818 W. Seventh Street
Los Angeles, California 90017
CT Corporation System (C0168406)

cc (via email):

Gordon Johnson, Environmental Affairs Manager, Shell Oil Products US, Martinez Refinery, Gordon.johnson@shell.com

Keith Kihara, Director, California Department of Toxic Substances Control Enforcement and Emergency Response Program, Keith.Kihara@dtsc.ca.gov

Randy Sawyer, Chief Environmental Health & Hazardous Materials Officer, Contra Costa County Health Services, Randy.Sawyer@hsd.cccounty.us



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Securities and Exchange Commission (SEC) for Registrants Duty to Disclosure Environmental Proceedings

i.JN11SO STATE:S ENV/RONMENTAL PROTECTION AGENCY
WASHiNGTON DC 1.0460

**NOTICE OF SECURITIES AND Ex CHANGE COMMISSION REGISTRANTS' DUTY To DISCLOSE ENVIRONMENTAL LEGAL PROCEEDINGS**

Securities and Exchange Commission regulations require companies registered with the SEC (e.g., publicly traded companies) to disclose, on at least a quarterly basis, the existence of certain administrative or judicial proceedings taken against them arising under Federal, State or local provisions that have the primary purpose of protecting the environment. instruction 5 to Item 103 of the SEC's Regulation S-K (17 CFR 229.103) requires disclosure of these environmental legal proceedings. For those SEC registrants that use the SEC' s "small business issuer" reporting system, Instructions 1-4 to Item 103 of the SEC's Regulation S-B (17 CFR 228.103) requires disclosure of these environmental legal proceedings.

If you are an SEC registrant. you have a duty to disclose the existence of pending or known to be contemplated environmental legal proceedings that meet any of the following criteria (17 CFR 229.103(5)(A)-(C)): Such proceeding is material to the business or financial condition of the r:egistrant:

> A.Such proceeding involves primarily a claim for damages. or involves potential monetary sanctions. capital expenditures, deferred charges or charges to income and the amount involved. exclusive of interest and costs: exceeds 10 percent of the current assets of the registrant and its subsidiaries on a consolidated basis: or
> B.A governmental authority is a party to such proceeding and such proceeding involves potential monetary sanctions, unless the registrant reasonably believes that such proceeding will result in no monetary sanctions. or in monetary sanctions. exclusive of interest and costs. ofless than $100.000: provided, however. that such proceedings which are similar in nature may be grouped and described generically.

Specific information regar ding the environmental legal proceedings that must be disclosed is set forth in Item 103 of Regulation S-K or, for registrants using the "smallbusiness issuer" reporting system. Item 103(a)-(b) of Regulation S-B. If disclosure is required, it must briefly describe the proceeding, "including the name of the court or agency in which the proceedings are pending. the date _instituted the principal parties thereto. a description of the factual basis alleged to underlie the proceedings and the relief sought."

You have been identified as a party to an environmental legal proceeding to which the United States government is, or w as, a party. If you are an SEC registrant. this environmental legal proceeding rhay trigger, or may already have triggered, the disclosure obligation under the SEC regulations described above.

This notice is being prqvided to inform you of SEC registrants' duty to disclose any relevant environmental legal proceedings to the SEC. This notice does not create, modify or interpret any existing legal obligatfons. it is not intendedto be an exhaustive description of the legally applicable requirements and it is not a substitute for regulations published in the Code of Federal Regulations. This notice has been issued to you for information purposes only. No determination of the applicability of this reporting requirement to your company has been made by any governmental entity. You should seek competent counsel in determining the applicability of these and other SEC requirements to the environmental legal proceedingat issue, as well as any other proceedings known to be contemplated by governmental authorities.

If you have any questions about the SEC's environmental disclosure requirements, please contact the SEC · Office of the Special Senior Counsel for Disclosure Operations at (202) 942-1888.

TITLE 17 - COMJ\10DITY AND SECURITIES EXCHANGES
Title 17, Volume 2, Parts 200 to 239

(Division: Securities and Exchange Commission)

## Part 229 - Standard Instructions for Filing Forms Under Securities Act of 1933, Securities Exchange Act of 1934 and Energy Policy and Conservation Act of 1975-Regulation S-K

## Subpart 229-100 - Business

### §229.103 (Item 103) Legal proceedings

Describe briefly any material pending legal proceedings, other than ordinary routine litigation incidental to the business, to which the registrant or any of its subsidiaries is a party or of which any of their property is the subject. Include the name of the court or agency in which the proceedings are pending, the date instituted, the principal parties thereto, a description of the factual basis alleged to underlie the proceeding'and the relief sought. Inclucle similar information as to any such proceedings known to be contemplated by governmental authorities.

*Instructions to Item 103:* I. **If the business ordinarily results in actions for negligence or other claims, no such action** or claim need be described unless it departs from the normal kind of such actions.

2. No information need be given with respect to any proceeding that involves primarily a claim for damages if the **amount involved, exclusive of interest and costs, does not exceed 10 percent of the current assets of the registrant and its subsidiaries on a consolidated basis. However, if any proceeding presents in large degree the same legal and** factual issues as other proceedings pending or known to be contemplated, the amount involved in such other proceedings shall be included in computing such percentage.

3. Notwithstanding Instructions I and 2, any material bankruptcy, receivership, or similar proceeding with respect to the registrant or any of its significant subsidiaries shall be described.

4. Any material proceedings to which any director, officer or affiliate of the registrant, any owner ofrecord.or beneficially of more than five percent of any class of voting securities of the registrant, or aiJ.y associate of any such director, officer, affiliate of the registrant, or security holder is a party adverse to the registrant or any of its subsidiaries or has a material interest adverse to the registrant or any of its subsidiaries also shall be described.

5. Notwithstanding the foregoing, an administrative or judicial proceeding (including, for purposes of A and B of this Instruction, proceedings which present in large degree the same issues) arising under any Federal, State or local provisions that have been enacted or adopted regulating the discharge of materials into the environment or primary for the purpose of protecting the environment shall not be deemed "ordinary routine litigation incidental to the business" and shall be described if:

A. Such proceeding is material to the business or financial condition of the registrant;

B. Such proceeding involves primarily a claim for damages, or involves potential monetary sanctions, capital expenditures, deferred charges or charges to income and the amount involved, exclusive of interest and costs, exceeds 10 percent of the current assets of the registrant and its subsidiaries on a consolidated basis; or

C. A governmental authority is a party to such proceeding and such proceeding involves potential monetary sanctions, unless the registrant reasonably believes that such proceeding will result in no monetary sanctions, or in monetary sanctions, exclusive of interest and costs, ofless than $100,000; provided, however, that such proceedings which are similar in nature may be grouped and described generically.

**To:** Johnson, Leslie@DTSC[Leslie.Johnson@dtsc.ca.gov]
**From:** Schofield, John
**Sent:** Thur 6/15/2017 11:42:00 PM
**Subject:** RE: RCRA Refinery Training
EPA DTSC Refinery training agenda (003).pdf

Forgot to include the additional attachment.

**********
John Schofield
U. S. Environmental Protection Agency
Region 9
Enforcement Division
Air, Waste and Toxics Branch, ENF-2-2
75 Hawthorne Street
San Francisco, CA 94105
(415) 972-3386
(415) 947-3530 (fax)
schofield.john@epa.gov
**********

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-----Original Message-----
From: Schofield, John
Sent: Thursday, June 15, 2017 3:53 PM
To: Johnson, Leslie@DTSC <Leslie.Johnson@dtsc.ca.gov>
Cc: Soria, Maria@DTSC <Maria.Soria@dtsc.ca.gov>; Tsuji, Denise@DTSC <Denise.Tsuji@dtsc.ca.gov>
Subject: RCRA Refinery Training

Leslie,

Thank you for attending the RCRA Refinery Training held on April 17, 2017 at DTSC's Chatsworth Office. Your participation was much appreciated. Attached is your training certificate for your files.

regards,

John

**********
John Schofield
U. S. Environmental Protection Agency
Region 9
Enforcement Division
Air, Waste and Toxics Branch, ENF-2-2
75 Hawthorne Street
San Francisco, CA 94105
(415) 972-3386
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# EPA/DTSC RCRA Refinery Training Agenda

9:00am -4:30pm
April 17, 2017 (Monday)
DTSC Office
9211 Oakdale Avenue, Chatsworth
Conference Rooms 144, 145 and 146

| | |
|---|---|
| 9:00 | Welcome/Opening (DTSC manager) |
| 9:10 – 10:25 | Part I - RCRA Process Based Inspection (Jackie Vega) |
| 10:25 – 10:35 | Break |
| 10:35 – 11:35 | Part II - Refinery RCRA Regulations (Sharon Lin) |
| 11:35 – 12:45 | Lunch |
| 1:00-2:00 | Part III – Refinery RCRA Issues & Strategies (Jackie Vega) |
| 2:00-2:30 | Part IV - Chevron El Segundo Overview (Rick Sakow) |
| 2:30-2:40 | Break |
| 2:40-3:40 | Part V – TSD LDR Issues/Case Studies (Jackie Vega) |
| 3:40-4:30 | Discussion, Q & A & Closing (All) |

**EPA Inspection/Training team:**

Jackie Vega – EPA National Enforcement Investigations Center (NEIC), vega.jackie@epa.gov
Sharon Lin – EPA Region 9 RCRA Enforcement, lin.sharon@epa.gov
Rick Sakow – EPA Region 9 RCRA Enforcement, Sakow.rick@epa.gov

**To:** Ripp, Thomas[Ripp.Tom@epa.gov]
**From:** Schofield, John
**Sent:** Fri 1/22/2016 8:31:02 PM
**Subject:** RE: Operating TSDF pull

The facility is not an active TSDF. The facility is under a corrective action CA/FO.

**********
John Schofield
U. S. Environmental Protection Agency
Region 9
Enforcement Division

Air, Waste and Toxics Branch, ENF-2-2
75 Hawthorne Street
San Francisco, CA 94105
(415) 972-3386
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**From:** Ripp, Thomas
**Sent:** Friday, January 22, 2016 7:48 AM
**To:** Schofield, John <Schofield.John@epa.gov>
**Subject:** Re: Operating TSDF pull

Thanks. I'll leave it in the inspection universe for now. It's easier to cut the number of inspections bid later than it is to add inspections.

Tom Ripp
Pesticides, Waste and Toxics Branch
202-564-7003 (Tu & W) 6:45 - 4:15
301-391-6198 (M alternate location) 9:00 - 2:30
Do not work Thursday or Friday

**From:** Schofield, John
**Sent:** Friday, January 22, 2016 10:43 AM
**To:** Ripp, Thomas
**Subject:** RE: Operating TSDF pull

Tom,

I believe it has been sold. I will find out the status. I can't remember if permitted.

I will find out.

regards,

John

**********
John Schofield
U. S. Environmental Protection Agency
Region 9
Enforcement Division

Air, Waste and Toxics Branch, ENF-2-2
75 Hawthorne Street
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**From:** Ripp, Thomas
**Sent:** Friday, January 22, 2016 7:40 AM
**To:** Schofield, John <Schofield.John@epa.gov>
**Subject:** Re: Operating TSDF pull

It is the Tesoro in Hawaii not CA.

Tom Ripp
Pesticides, Waste and Toxics Branch
202-564-7003 (Tu & W) 6:45 - 4:15
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**From:** Schofield, John
**Sent:** Friday, January 22, 2016 10:25 AM
**To:** Ripp, Thomas
**Subject:** RE: Operating TSDF pull

I will look. Which Tesoro (2 in SoCal: Carson/Wilmington) and one in Martinez? One of the Tesoro refineries is former BP (SoCal).

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John Schofield
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**From:** Ripp, Thomas
**Sent:** Thursday, January 21, 2016 5:27 PM
**To:** Schofield, John <Schofield.John@epa.gov>
**Subject:** Fw: Operating TSDF pull

John, do you know if the Tesoro refinery is still an operating TSDF? I need to know for the ACS inspection bidding process.

Tom Ripp
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**From:** Ripp, Thomas
**Sent:** Thursday, January 21, 2016 8:12 PM
**To:** Jones, Lauren W.
**Cc:** Lin, Sharon
**Subject:** Operating TSDF pull

I've identified another issue in the pull. For some reason the Tesoro refinery in Hawaii did not show up in the operating TSDF pull. In RCRAInfo BR they reported managing nearly 465,000 tons of hazardous waste. ECHO indicates that they are active (that doesn't necessarily mean operating), but between ECHO and BR it seems to be an operating facility. I'm cc'ing Sharon Lin in case she can shed some light on this facility's status.

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202-564-7003 (Tu & W) 6:45 - 4:15
301-391-6198 (M alternate location) 9:00 - 2:30
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**To:** Ripp, Thomas[Ripp.Tom@epa.gov]
**From:** Schofield, John
**Sent:** Fri 1/22/2016 5:06:59 PM
**Subject:** RE: Operating TSDF pull

The refinery was sold to Par Petroleum that now operates the facility as Hawaii Independent Energy: www.hawaiiindependentenergy.com. Waiting on R9 HI Liaison to get back to me on permit status.

**********
John Schofield
U. S. Environmental Protection Agency
Region 9
Enforcement Division

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**Sent:** Friday, January 22, 2016 10:25 AM
**To:** Ripp, Thomas
**Subject:** RE: Operating TSDF pull

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**Cc:** Lin, Sharon
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301-391-6198 (M alternate location) 9:00 - 2:30
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**To:** Saenz, Diana[Saenz.Diana@epa.gov]
**From:** Schofield, John
**Sent:** Wed 1/13/2016 5:58:43 PM
**Subject:** RE: R9 Valero case

Sharon Lin case manager will respond to your e-mail ASAP.

**********
John Schofield
U. S. Environmental Protection Agency
Region 9
Enforcement Division

Air, Waste and Toxics Branch, ENF-2-2
75 Hawthorne Street
San Francisco, CA 94105
(415) 972-3386
(415) 947-3530 (fax)
schofield.john@epa.gov
**********

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**From:** Saenz, Diana
**Sent:** Wednesday, January 13, 2016 9:57 AM
**To:** Schofield, John <Schofield.John@epa.gov>
**Subject:** R9 Valero case

John - - I remember you talking about the inspection at a Valero refinery in R9 and that there were RCRA violations. Were there any 112(r) violations as well?

Do you have an inspection report you could share?

Thank you very much

Diana

Diana J. Saenz

Acting Associate Director

Waste and Chemical Enforcement Division

Office of Civil Enforcement/ U.S. EPA

1200 Pennsylvania Ave., N.W.

Mailcode 2249A

Washington, D.C. 20460

Phone: (202) 564-4209

Fax: (202) 564-0022

Saenz.Diana@epa.gov

**To:** Vega, Jackie[Vega.Jackie@epa.gov]
**Cc:** Armstrong, Alice E[AliceArmstrong@chevron.com]
**From:** Mitchum, Kristi
**Sent:** Tue 3/22/2016 1:02:43 AM
**Subject:** Remaining Deliverables

Jackie – The team is working on gathering the remaining requests which you emailed us on 3/14 and we would like to request extending the delivery from 3/28 to 4/8. This week is spring break as well as 2 state holidays and a lot of my team is taking some much needed vacation with family (including myself). We are also needing additional time to find some of the information you requested that need data pulled from maintenance records and databases, as well as prepare the document for delivery (copy and pdf). We promise to continue to email you over this time frame when we have complete answers to your questions as they become available. Please let me know if you have any concerns with the extension.

Thank you,

Kristi

**Kristi Mitchum**

HES Manager

**Hawaii Refinery**

Chevron Products Company

91-480 Malakole Street

Kapolei, HI 96707

Tel 808 682 3145

Fax 808 682 2214

Mobile 808 351 5871

kristi.mitchum@chevron.com

The Hawaii Refinery will operate injury and incident free, and through operational discipline, produce sustainable financial results and create enterprise value.

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**To:** Lin, Sharon[Lin.Sharon@epa.gov]
**From:** Vega, Jackie
**Sent:** Sat 12/6/2014 1:18:35 AM
**Subject:** RE: Valero Benicia Refinery Wastewater Treatment Scheme

Hi Sharon!

Unfortunately, it looks like page 15 was folded already when Valero made the copy for us. I'll check with the other team members and see if anyone has a clean copy.

Thanks,

Jackie

**From:** Lin, Sharon
**Sent:** Monday, December 01, 2014 3:40 PM
**To:** Vega, Jackie
**Subject:** Valero Benicia Refinery Wastewater Treatment Scheme

Hi, Jackie,

Hope you had a great Thanksgiving!

I am wondering if you have a clean copy of the subject diagram. Mine was marked up during the inspection. pg 15 of Appendix G could be it, but it only showed half of the diagram. If you could just email me that page, that would be great. Thanks!

We are working on sending you our comments by December 12. Thanks!

Sharon Lin, P.E.

U.S. Environmental Protection Agency Region 9

Enforcement Division

Air, Waste and Toxics Branch, ENF-2-2
75 Hawthorne Street

San Francisco, CA 94105

Tel: (415) 972-3446

Email: Lin.Sharon@epa.gov

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**Cc:** Gross, Barbara[Gross.Barbara@epa.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Mon 8/3/2015 4:58:44 PM
**Subject:** RE: Tesoro Refining and Marketing Company, Carson Refinery Draft Post Closure Permit

Hi Mike,

It is good to hear from you as well. I should have public noticed the draft permit much earlier but it got stuck in the review process. At this stage I do not think that we can issue the final permit by Sept 30, 2015. Our Public Participation has its own timing needs to public notice and mail out. We also have to wait a few days after the comment period ends to make sure that any comments mailed to us by the end of the comment period will be reviewed and responded to. I have a meeting scheduled with the Community Advisory Panel on August 12, 2015 to update them of this draft permit. I also have a public meeting scheduled for August 27, 2015. We have been also in touch with community activist. We may get comments regarding other activities at the site that has nothing to do with this permit but we will have to respond. If you have any questions please do not hesitate to e-mail me or call me at (818) 717-6679.

Thanks,

Mike Eshaghian

Project Manager

**From:** Zabaneh, Mahfouz [mailto:Zabaneh.Mahfouz@epa.gov]
**Sent:** Friday, July 31, 2015 9:34 AM
**To:** Eshaghian, Mike@DTSC
**Cc:** Gross, Barbara
**Subject:** RE: Tesoro Refining and Marketing Company, Carson Refinery Draft Post Closure Permit

Hi Mike,

It is good to hear from you. I hope all is well with you too.

If we decide not to review this draft permit, do you think you can public notice it earlier that 8/12 and have it issued before Sep 30, 2015 ( Federal Fiscal Year), assuming you don't get any comments during the public comment period?

I would like to understand what our options are!

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Eshaghian, Mike@DTSC [mailto:Mike.Eshaghian@dtsc.ca.gov]
**Sent:** Thursday, July 30, 2015 3:13 PM
**To:** Zabaneh, Mahfouz
**Cc:** Eshaghian, Mike@DTSC
**Subject:** Tesoro Refining and Marketing Company, Carson Refinery Draft Post Closure Permit

Hi Mike,

I have not talked with you for a while. I hope all is well. I have attached draft Post Closure Permit Renewal for Tesoro Refining and Marketing Company, Carson Refinery, previously BP West Coast Products, Carson Refinery. We are planning to public notice this draft permit on August 12, 2015. Please let me know if you have any comments before August 12, 2015. Thanks.

Mike Eshaghian

Department of Toxic Substances Control

Permitting Branch

(818) 717-6679

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**Cc:** Eshaghian, Mike@DTSC[Mike.Eshaghian@dtsc.ca.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Thur 7/30/2015 10:12:40 PM
**Subject:** Tesoro Refining and Marketing Company, Carson Refinery Draft Post Closure Permit
FINAL Draft Post Closure Permit Tesoro Carson Refinery August 12- 2015.docx

Hi Mike,

I have not talked with you for a while. I hope all is well. I have attached draft Post Closure Permit Renewal for Tesoro Refining and Marketing Company, Carson Refinery, previously BP West Coast Products, Carson Refinery. We are planning to public notice this draft permit on August 12, 2015. Please let me know if you have any comments before August 12, 2015. Thanks.

Mike Eshaghian

Department of Toxic Substances Control

Permitting Branch

(818) 717-6679

# California Environmental Protection Agency
# Department of Toxic Substances Control
# DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

Facility EPA ID Number:
CAD077227049

Effective Date:

Expiration Date:

**Facility Name:**
Tesoro Refining & Marketing Company LLC, Carson Refinery
1801 E. Sepulveda Blvd.
Carson, California 90810

**Facility Owner Name:**
Tesoro Refining & Marketing Company LLC
2350 E. 223rd Street
Carson, California 90810

**Operator Name:**
Tesoro Refining & Marketing Company LLC
Carson Refinery
2350 E. 223rd Street
Carson, California 90810

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Post Closure Facility Permit is hereby issued to: Tesoro Refining & Marketing Company LLC, Carson Refinery.

The issuance of this Permit is subject to the terms and conditions set forth in the Approved Post Closure Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions dated June 17, 2014, July 7, 2014 and December 9, 2014. The Permit consists of 27 pages.

Phil Blum, P.E.
Office of Permitting
Department of Toxic Substances Control

Date: _____

**TESORO REFINING & MARKETING COMPANY LLC**
**CARSON REFINERY**
**1801 E. SEPULVEDA BLVD.**
**CARSON, CALIFORNIA 90810**
**DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT**
**EAST AND WEST RETENTION BASINS**
**EPA ID NUMBER CAD 077227049**

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. **Owner of Facility**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

2. **Owner of Real Property**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

3. **Operator of Facility**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

4. **Location**

The Tesoro Refining & Marketing Company LLC, Carson Refinery (Facility) is located at 1801 East Sepulveda Boulevard in Carson, California. Also the Facility has been using the 2350 E. 223rd Street, Carson, California 90810 address since their administrative Offices are in the main Campus Building.

The Facility is within Township 4 South, Range 13 West; Section 21. The assessor's parcel number is: 7315-006-003. The Refinery and most of the surrounding area are zoned for heavy manufacturing. As shown on Figure 1, the Facility is bordered by Wilmington Avenue to the west, 223rd Street on the north, Dominguez Channel and Alameda Street on the east and Sepulveda Boulevard on the south. Surrounding land use is primarily heavy manufacturing except for two areas. South of Sepulveda Boulevard and west of Wilmington Avenue are single family residences. North of 223rd Street and along the 405 freeway there are commercial automotive businesses.

The Facility is located in five separate geographic areas: the Main Refinery, the North Property, the Northeast Property, the Southeast Property, and the Southwest Property, which was formerly called the Southwest Tank Farm (Figure 2). Three roads—Sepulveda Boulevard, Wilmington Avenue, and Alameda Street—and the Dominguez Channel bound the majority of the Refinery. Most refining operations are conducted within the Main Refinery and the North Property. The Northeast Property

is located north and east of the Dominguez Channel; the Southeast Property is located east of Alameda Street; and the Southwest Property is located south of Sepulveda Boulevard. The current total area of the five geographical areas is approximately 702 acres (Figure 2).

The North Property consists of refining facilities, a warehouse, and shops. The Main Refinery consists of refining facilities, a cogeneration plant, and the majority of the Refinery's product shipping facilities and product storage area, referred to as the Main Tank Farm. The Northeast Property includes the Northeast Tank Farm, contractor parking and staging, and an employee athletic field. There is also a polypropylene unit in this area which is owned by a separate party. The northern half of the Southeast Property is used for coke storage. Most of the southern half of the Southeast Property is used for parking and vehicle storage. The Carson Product Terminal is located off site to the east (Figure 2).

The Southwest Property occupies an area of about 90 acres. Previous property owners used the Southwest Property for the bulk storage of liquid hydrocarbons in concrete-lined reservoirs. These former reservoirs were last used in 1970. The eastern half of the Southwest Property has been paved and is currently being leased for shipping container storage. The Carson Crude Terminal is located off site to the south (Figure 2).

The East and West Retention Basins, for which this RCRA Post-closure Permit Application (Application) was prepared, are located within the Main Refinery (shown in Figures 1, 2, 3 and 4).

## 5. Description of Facility Operations

The Facility is situated in a predominantly industrial area and is surrounded by a variety of manufacturing and petroleum-refining and storage facilities. The Facility currently has the capacity to process approximately 260,000 barrels of crude oil per day to make gasoline, jet fuel, diesel, liquefied petroleum gas (LPG), sulfur, and petroleum coke. A cogeneration plant, located on site, produces power to supply the Refinery and to export to utilities.

The Facility operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

## 6. Facility History

Petroleum refining operations have been conducted at the site since 1923 when the Pan American Petroleum Company began operations. In 1937, Richfield Oil Corporation purchased the property and expanded the refining operations. Additional parcels of land, purchased from 1937 through 1945, were added to the Refinery. The Atlantic Refining Company and the Richfield Oil Corporation merged in 1966. In 2000, BP America Inc. acquired Atlantic Richfield Company. As a result, the name of the Refinery was changed to the BP West Coast Products, Carson Refinery in 2002. In June 2013, the BP West Coast Products, Carson Refinery was sold to Tesoro Refining & Marketing Company LLC (Tesoro).

The East and West Retention Basins became regulated under RCRA on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Facility historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter. The Retention Basins were granted interim status on September 25, 1990.The Facility initiated closure procedures for the Retention Basins with submittal of a closure plan in 1993. A revised closure plan was submitted in 1994. In 1995, the Interim Status Closure and Post-Closure Plan, Revision 2 was submitted.

On December 4, 1997, DTSC approved the closure certification of the East and West Retention Basins. The Facility submitted a Post-Closure Permit Application for the Retention Basins on May 21, 1998 and a subsequent revision in December 2002. DTSC issued the “Final Hazardous Waste Facility Post-Closure Permit” for the Retention Basins on December 24, 2003 with the effective date of January 26, 2004. BP West Coast Products submitted a Post Closure Permit Renewal Application on September 27, 2012.

A Class 1* Post Closure Permit Modification was issued on August 5, 2013 for the change of ownership to Tesoro Refining & Marketing Company. On November 25, 2013, Tesoro submitted a Revised Post Closure Permit Application dated September 2013 due to the change of ownership. Subsequent revisions to the Application were submitted on June 17, 2014, July 7, 2014 and December 9, 2014 in response to DTSC comments.

## 7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility shall be deemed to have started from the effective date of this Post Closure Permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

## PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

The revised Part "A" Application dated November 7, 2013 and the DTSC-approved revised Post Closure Permit Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions submitted on June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) are hereby made a part of this Permit by reference.

2. EFFECT OF PERMIT

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.

(b) The Permittee is permitted to operate, monitor and maintain this Facility post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes in the East and West Retention Basins not specifically authorized in this Permit or otherwise authorized by DTSC is strictly prohibited.

(c) Compliance with the terms and conditions of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., tit. 22, §66270.43).

(g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards (RWQCB) and any conditions imposed pursuant to section 13227 of the Water Code.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in California Code of Regulations, title 14, section 15070 et seq.

4. ENVIRONMENTAL MONITORING

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6.

(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility are those described in Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application.

(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1 of the Approved Application.

(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility are described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.1; of the Approved Application. During future sampling events, if the Facility finds constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Facility shall add them to the list of COCs.

(d) For the purpose of California Code of Regulations, title 22, section 66264.94, the Concentration Limits for the Facility are described in Appendix 6, RCRA

Basins Groundwater Monitoring Plan, section 2.1.1 of the Approved Application.

(e) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 4.1 of the Approved Application.

(f) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility are described in Appendix 3a, RCRA Retention Basins Post Closure Plan, section 2.2 of the Approved Application; and Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.2 of the Approved Application.

(g) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.3 of the Approved Application and shall be 30 years beginning with the date of the issuance of this post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

(h) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility is described in Appendix 6, RCRA Retention Basins Groundwater Monitoring Plan, section 4.0 of the Approved Application. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application.

(i) The Facility shall comply with the requirements of the Los Angeles Regional Water Quality Control Board (LARWQCB) issued Cleanup and Abatement Order (CAO) No. 90-121 to Atlantic Richfield Company and any subsequent Order. Requirements of the CAO included identification of sources, delineation of plumes, recovery of light non-aqueous phase liquid (LNAPL) throughout the site, and initiation of dissolved-plume cleanup.

5. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).

6. ACCESS

(a) DTSC, its contractors, employees, agents, and/or any United States Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance of the unit and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit, other than those specified in this Part IV, unless otherwise authorized by DTSC. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of California Code of Regulations, title 22, section 66270.1(c) and other similar, unit-specific regulatory requirements, this Facility has two Post Closure Hazardous Waste Management Units for the purpose of this Permit. The two Post Closure units are East and West Retention Basins. The Refinery operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Refinery's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District. The Retention Basins became regulated under the RCRA on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Refinery historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter. The East and West Retention Basins are the regulated units that are under post-closure care. These units are described in detail in the Approved Application and are as follows:

UNIT NAME:

The East Retention Basin

LOCATION:

The East Retention Basin is located within the Main Refinery (shown in Figures 1, 2, 3, 4, 5, 6 and 8). The East Retention Basin site was the location of a lube oil plant and boiler house. The East Retention Basin was constructed in 1969 and closed in 1997.

ACTIVITY TYPE:

Groundwater monitoring; operation and maintenance activities; site inspection.

ACTIVITY DESCRIPTION:

The activities include groundwater monitoring, site inspections, repair and maintenance of the monitoring wells and the East ~~and West~~ Retention Basin~~s~~ as described in Appendix 6 of the Approved Application. Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with the Retention Basin include the Basin walls, liners, and pumps.

The Facility has an extensive groundwater monitoring network and past and planned remediation activities. From 2013, the post closure groundwater monitoring program has been expanded to seven (7) wells to be gauged and four (4) wells to be sampled as indicated in the following table:

East Retention Basin Wells
AMR/601-D (gauging)
AMR/602-D (gauging)
AMR/603-D (gauging)
AMR/604-D (monitoring –Point of Compliance (POC))
AMR/605-D (monitoring -POC)
AMR/611-D (monitoring -POC)
AMR/613-D (monitoring -POC)

Locations of the groundwater monitoring wells are shown in Figures 4 and 5. Groundwater samples are collected semiannually, in or near April and October of each year, from the following wells at the East Retention Basin:

East Retention Basin: AMR/604-D, AMR/605-D, AMR/611-D, and AMR/613-D

If LNAPL is detected when gauging any of these wells, no sample is collected from that well. Groundwater samples collected from the East Retention Basin~~s~~ monitoring wells are analyzed using current US EPA Methods for the following routine constituents: Volatile organic compounds (VOCs) (including benzene, ethyl benzene, toluene, and xylene, fuel oxygenates, and ethanol) ; and total petroleum hydrocarbons (TPHs) .
In addition to the above routine constituents, groundwater samples collected from the Retention Basin wells will be analyzed for Appendix IX constituents every 5 years.

PHYSICAL DESCRIPTION:

The East Retention Basin~~s~~ was constructed in 1969 with 4 inches of gunite sprayed over 4-inch by 4-inch steel mesh. The concrete walls and floors of the Retention Basin~~s~~ were then coated with primer coat and an impervious, chemically resistant, epoxy topcoat. In 2012, a portion of the floor of the East Retention Basin was filled in with crushed miscellaneous base covered with 6 inches of steel-reinforced concrete. The East Retention Basin was filled to

an average depth of 5 feet. The concrete was sealed consistent with the original Retention Basin design with a primer coat and an impervious, chemically resistant, epoxy topcoat. The East Retention Basin is 200 feet by 210 feet with an average depth of 19 feet. See Figures 6 and 8.

MAXIMUM CAPACITY:

The East Retention Basin has a useable volume of 4,320,000 gallons, which allows for 1 foot of freeboard.

WASTE SOURCES:

The Facility historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded TCLP criterion for benzene (D018) of 0.5 milligrams per liter.

WASTE TYPES:

The Facility operates the East Retention Basins as a surface impoundment for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basin is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

RCRA WASTE CODES:

Benzene: D018

UNIT NAME:

West Retention Basin

LOCATION:

The West Retention Basins is located within the Main Refinery (shown in Figures 1, 2, 3, 4, 5, 7 and 9). The West Retention Basin site was historically used to manage wastewater and slop oil. The West Retention Basin was constructed in 1969 and closed in 1997.

ACTIVITY TYPE:

Groundwater monitoring; operation and maintenance activities; site inspection.

ACTIVITY DESCRIPTION:

The activities include groundwater monitoring, site inspections, repair and maintenance of the monitoring wells and the West Retention Basin as described in Appendix 6 of the Approved Application. Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with the Retention Basin include the Basin walls, liners, and pumps.

The Facility has an extensive groundwater monitoring network and past and planned remediation activities. From 2013, the post closure groundwater monitoring program has been expanded to six (6) wells to be gauged and three (3) wells to be sampled as indicated in the following table:

West Retention Basin Wells

AMR/606-D (gauging)
AMR/607-D (monitoring -POC
AMR/608-D (monitoring -POC)
AMR/609-D (gauging)
AMR/610-S (gauging)
AMR/612-D (monitoring upgradient)

Locations of the groundwater monitoring wells are shown in Figure 4 and 5. Groundwater samples are collected semiannually, in or near April and October of each year, from the following wells at the West Retention Basin:

West Retention Basin: AMR/607-D, AMR/608-D, and AMR/612-D

If LNAPL is detected when gauging any of these wells, no sample is collected from that well. Groundwater samples collected from the West Retention Basin monitoring wells are analyzed using current US EPA Methods for the following routine constituents: Volatile organic compounds (VOCs) (including benzene, ethyl benzene, toluene, and xylene, fuel oxygenates, and ethanol) ; and total petroleum hydrocarbons (TPHs) .
In addition to the above routine constituents, groundwater samples collected from the Retention Basin wells will be analyzed for Appendix IX constituents every 5 years.

PHYSICAL DESCRIPTION:

The West Retention Basin was constructed in 1969 with 4 inches of gunite sprayed over 4-inch by 4-inch steel mesh. The concrete walls and floors of the Retention Basins were then coated with primer coat and an impervious, chemically resistant, epoxy topcoat. The West

Retention Basin is 269 feet by 300 feet with an average depth of 22 feet. See Figures 7 and 9.

MAXIMUM CAPACITY:

The West Retention Basin has a useable volume of 10,230,000 gallons, which allows for 1 foot of freeboard.

WASTE SOURCES:

The Facility historically used the Retention Basin for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basin stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter.

WASTE TYPES:

The Facility operates the West Retention Basin as a surface impoundment for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

RCRA WASTE CODES:

Benzene: D018

## PART V. SPECIAL CONDITIONS

(a) The Permittee shall comply with the requirements of the LARWQCB issued CAO No. 90-121 to Atlantic Richfield Company and any subsequent Order. The Permittee shall monitor the groundwater in accordance with the Order and any subsequent order and in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. The Permittee shall simultaneously provide to DTSC a copy of all the submittals required by the RWQCB.

(b) The Permittee shall comply with the Annual Report requirements specified in California Code of Regulations, title 22, chapter 14 and shall include the monitoring and response program data in its annual report. In addition, the Permittee shall submit a post closure semiannual groundwater monitoring report after each semiannual groundwater monitoring and sampling event to DTSC.

(c) Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with each Retention Basins include the Retention Basin walls, liners, and pumps

(d) The Permittee shall conduct annual groundwater monitoring and periodic site inspection, repair and maintenance activities during the post closure care period in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. Additional inspections will be performed after any earthquakes of sufficient magnitude or intensity to potentially cause damage to Retention Basin structures.

(e) The Permittee shall maintain the Retention Basins so that it is free of cracks, spalling, and gaps upon visual inspection of the liner. The Permittee shall immediately repair all cracks, spalling and gaps upon detection in the liner and/or the basal structure of the Retention Basins.

(f) When more than 3 feet of stormwater and/or non-hazardous wastewater have accumulated in a Retention Basin, the Permittee will collect a representative sample in laboratory supplied container (s) and analyze it for total benzene (D018) using USEPA Method 8260B. The results of the water analysis shall be included in a semiannual groundwater monitoring report submitted to DTSC. If a sample exceeds 0.5 mg/l of benzene, DTSC shall be notified by telephone or e-mail within 24 hours of receipt of the analytical results. Written notification accompanied by the certified analytical report will be provided within 7 days from the verbal or e-mail notification or seven days following receipt of the final laboratory report, whichever is later. The notification shall include but not be limited to the following:

1) Date of use;

2) Storage duration;

3) Volume of wastewater;

4) Analytical results of wastewater(If the sampling results shows benzene concentrations exceeding 0.5 mg/L, the report shall explain the reasons and sources of the higher benzene concentrations in the wastewater or storm water);

5) Air monitoring results if any;

6) Type of emergency which required the use of the Retention Basins.

(g) The Permittee shall not store any hazardous waste in the Retention Basins. The Permittee shall immediately test storm water in the Retention Basins following an emergency or use and commence immediate pumping of the storm, after sampling, back into the treatment systems when capacity is available. The Permittee shall follow the notification requirements specified in item (g). If the sludge is determined to be a hazardous waste, the Permittee shall send it offsite for treatment or disposal at an authorized hazardous waste treatment or disposal facility.

(h) The Permittee shall maintain a minimum of 1-foot of freeboard when the Retention Basins are in use.

(i) The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1. The Annual Groundwater Monitoring and Response Program Report may be submitted simultaneously to DTSC and RWQCB by each March 1.

(j) Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 360 days of the approval of this Permit, the Permittee shall have a DTSC-approved Land Use Covenant signed and recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement by check payable to the Department of Toxic Substances Control and shall be sent to: Accounting Unit, Department of Toxics Substances Control, P.O. Box 806, Sacramento, California 95812-0806. All checks shall reference the name and address of the Facility.

(k) The Permittee shall maintain the financial mechanism dated 3/23/2015 that was approved by DTSC for a total of $29,636,000 ($10,660,000 is for post closure as it is calculated in Appendix 5, Table 8, Post-Closure Cost Estimate Financial Assurance Documentation of the approved Application and the balance is maintained for corrective action) to demonstrate financial assurance for post closure and corrective action.

## PART VI. CORRECTIVE ACTION

A. SUMMARY OF THE CORRECTIVE ACTION AND GROUNDWATER REMEDIATION

The Facility performed early investigation and remediation activities as voluntary actions from the mid-1970s to mid-1980s. In 1985, Los Angeles area refineries were issued orders by the LARWQCB to investigate and initiate cleanups. Order No. 85-17, issued to Atlantic Richfield Company, required subsurface investigation and reporting. The Facility was already meeting most of the subsurface investigation requirements of the Order; however, in response to the Order, the Facility initiated a groundwater monitoring program and began submitting reports on a quarterly, and subsequently a semiannual, basis to the LARWQCB.

In 1990, the LARWQCB issued Cleanup and CAO No. 90-121 to Atlantic Richfield Company. Requirements of the CAO included identification of sources, delineation of plumes, recovery of LNAPL throughout the site, and initiation of dissolved-plume cleanup. Consistent with the CAO (and SB 1082), site-wide groundwater corrective action is conducted under the oversight of the LARWQCB.

The Facility, along with other members of the Carson Regional Groundwater Group (CRGG), embarked on a 4-year groundwater modeling program to develop a better understanding of groundwater flow. The U.S. Environmental Protection Agency (USEPA) and the LARWQCB have been involved in the oversight of these efforts. Fluid levels throughout the refinery are measured in wells to monitor changes in groundwater elevation and gradient, and to monitor for new occurrences of LNAPL. LNAPL is being monitored semiannually and recovered from on-site wells Potential sources of LNAPL continue to be investigated and characterized.

B. CORRECTIVE ACTION CONDITIONS

1. The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the LARWQCB pursuant to the Cleanup and CAO No. 90-121 and any other subsequent orders or requirements by the LARWQCB or US EPA.

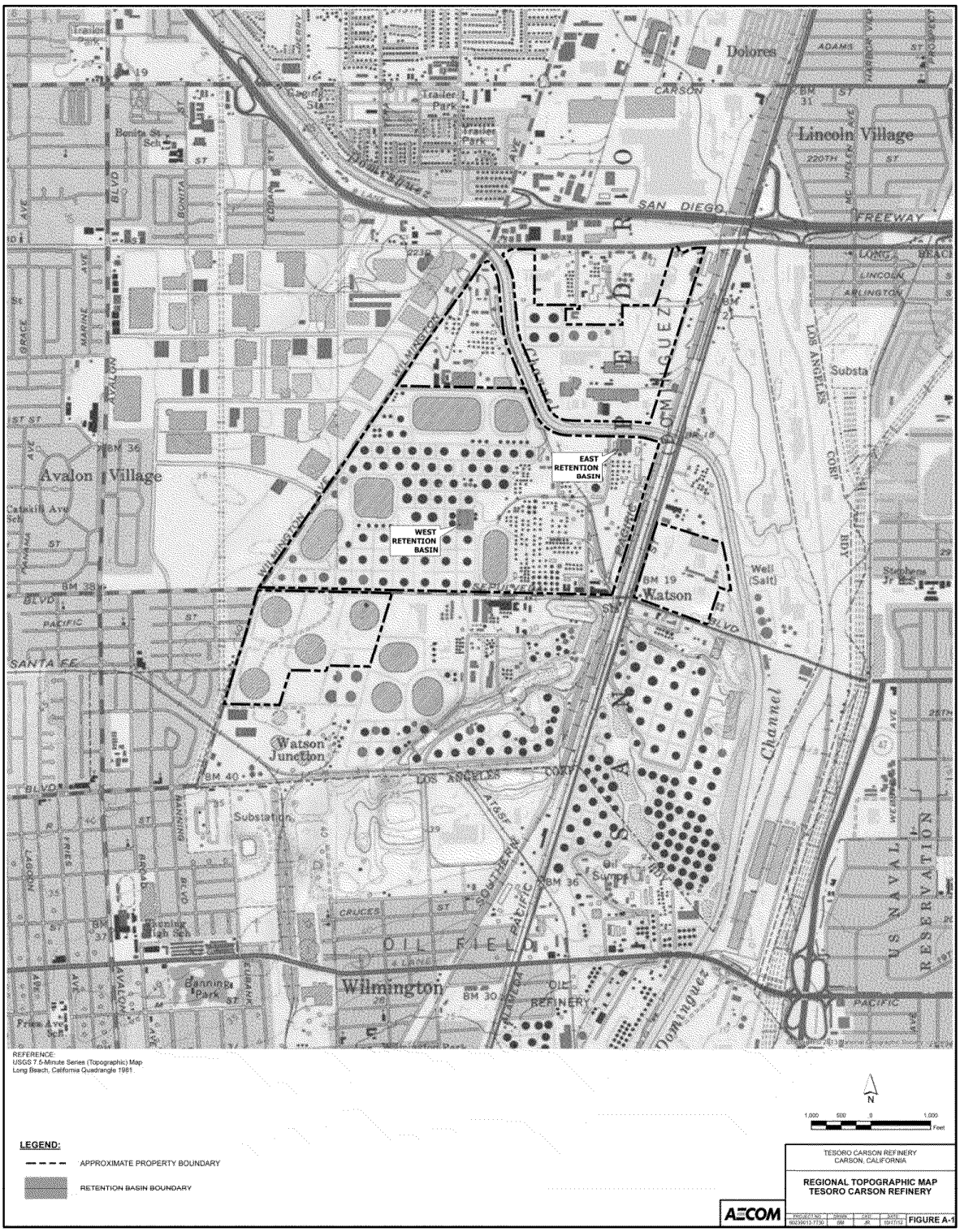


Figure 1 (Figure A-1 of the Permit Application)

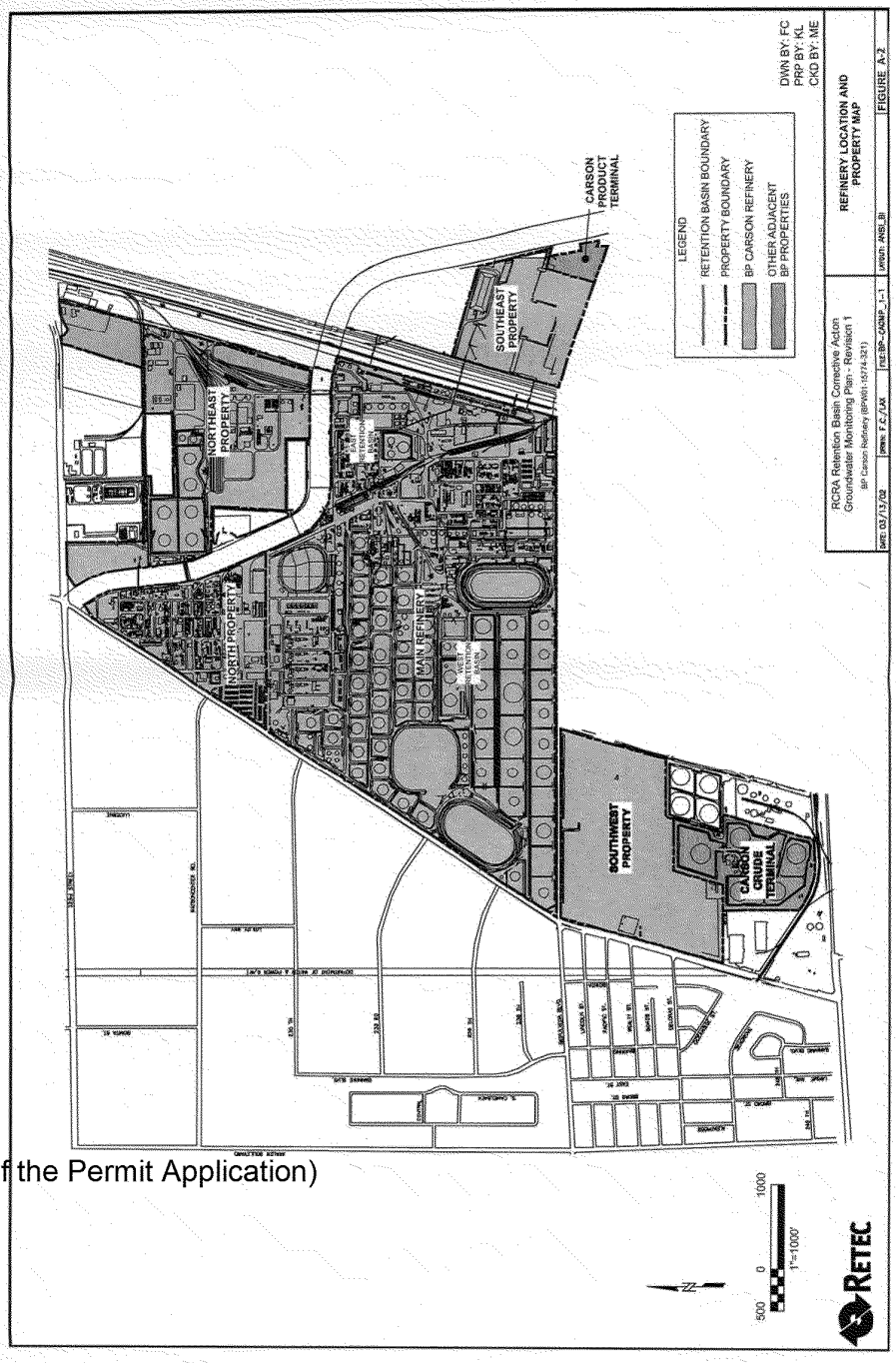


Figure 2 (Figure A-2 of the Permit Application)

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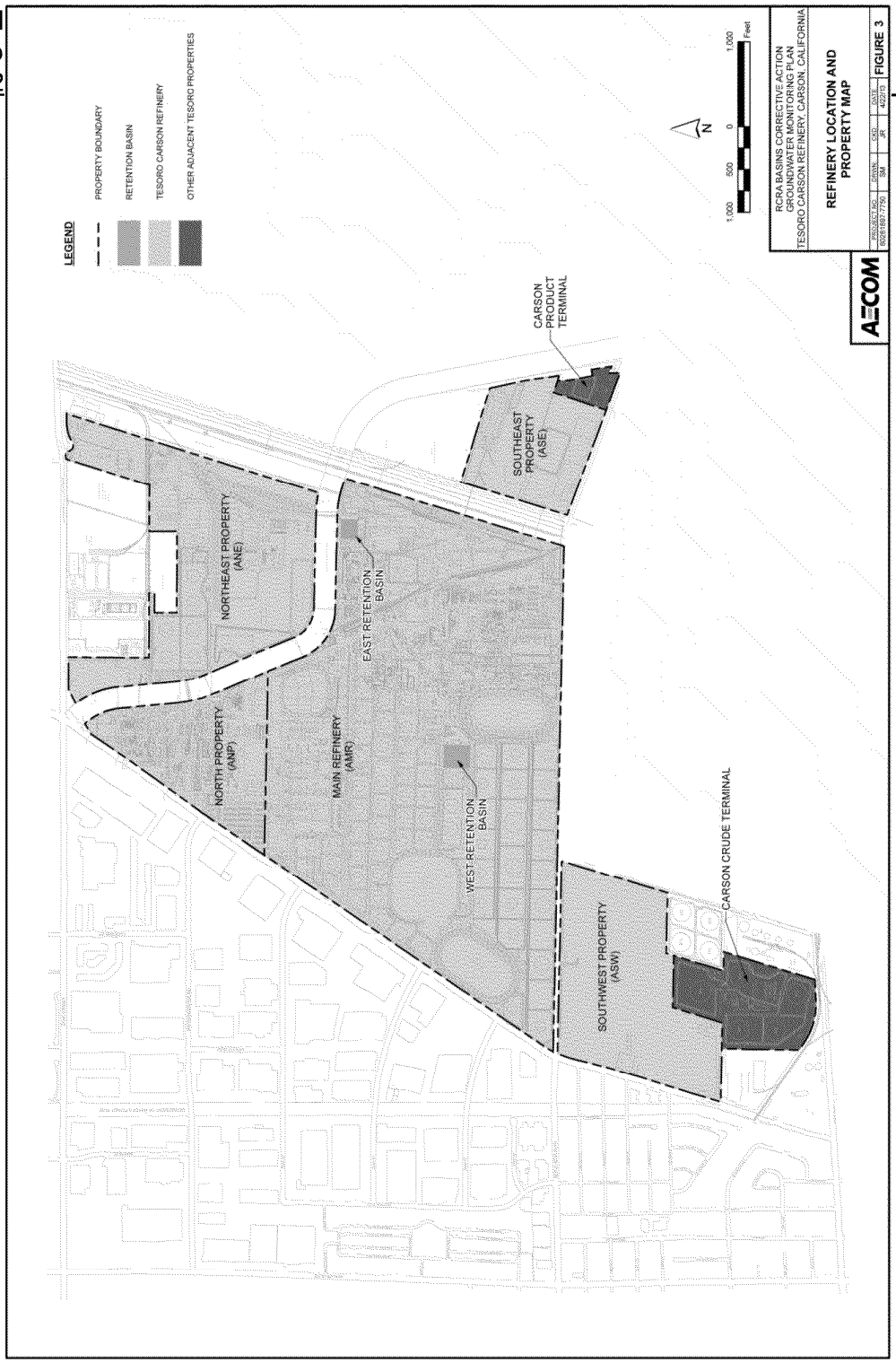
Page 2

Figure



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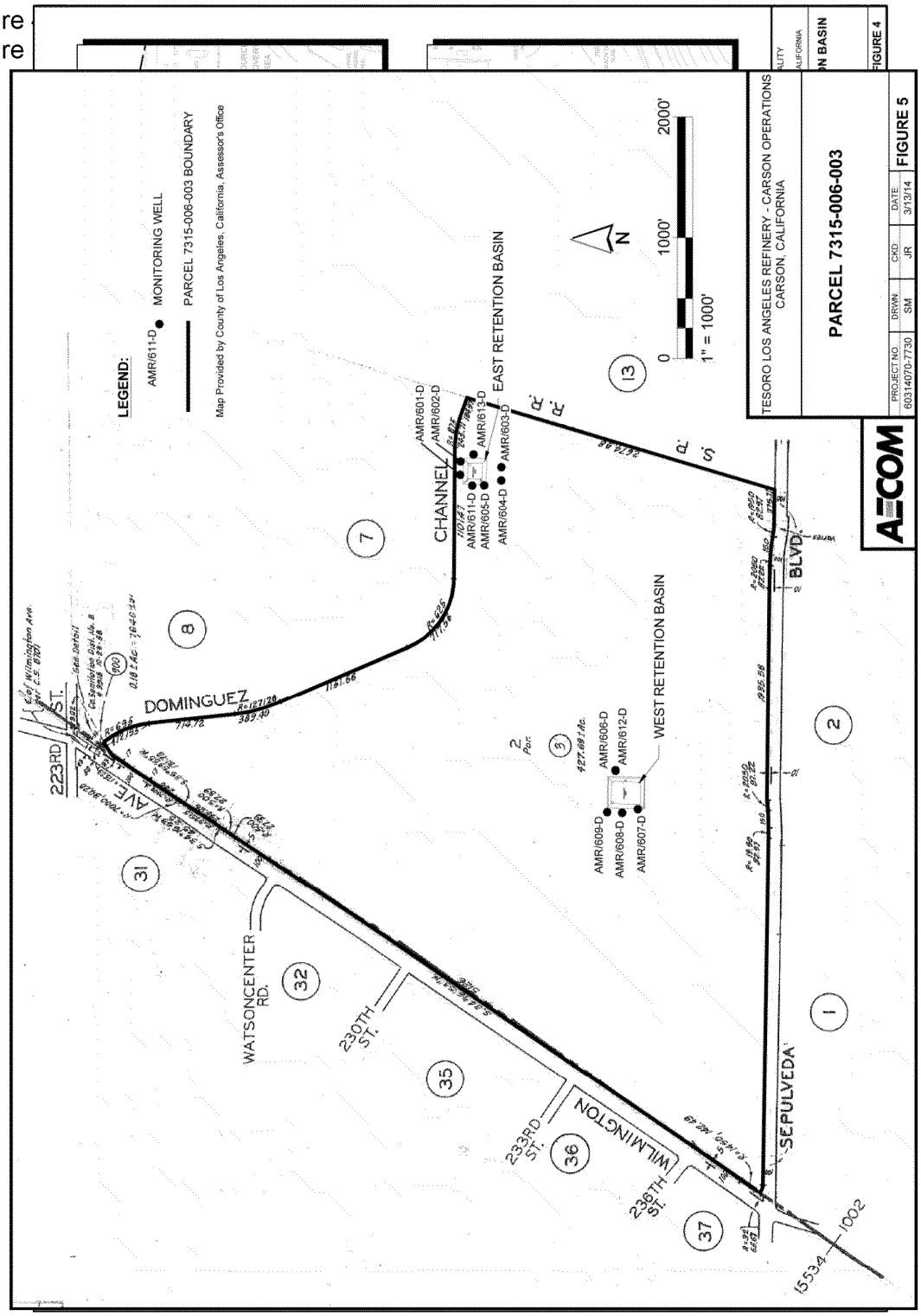


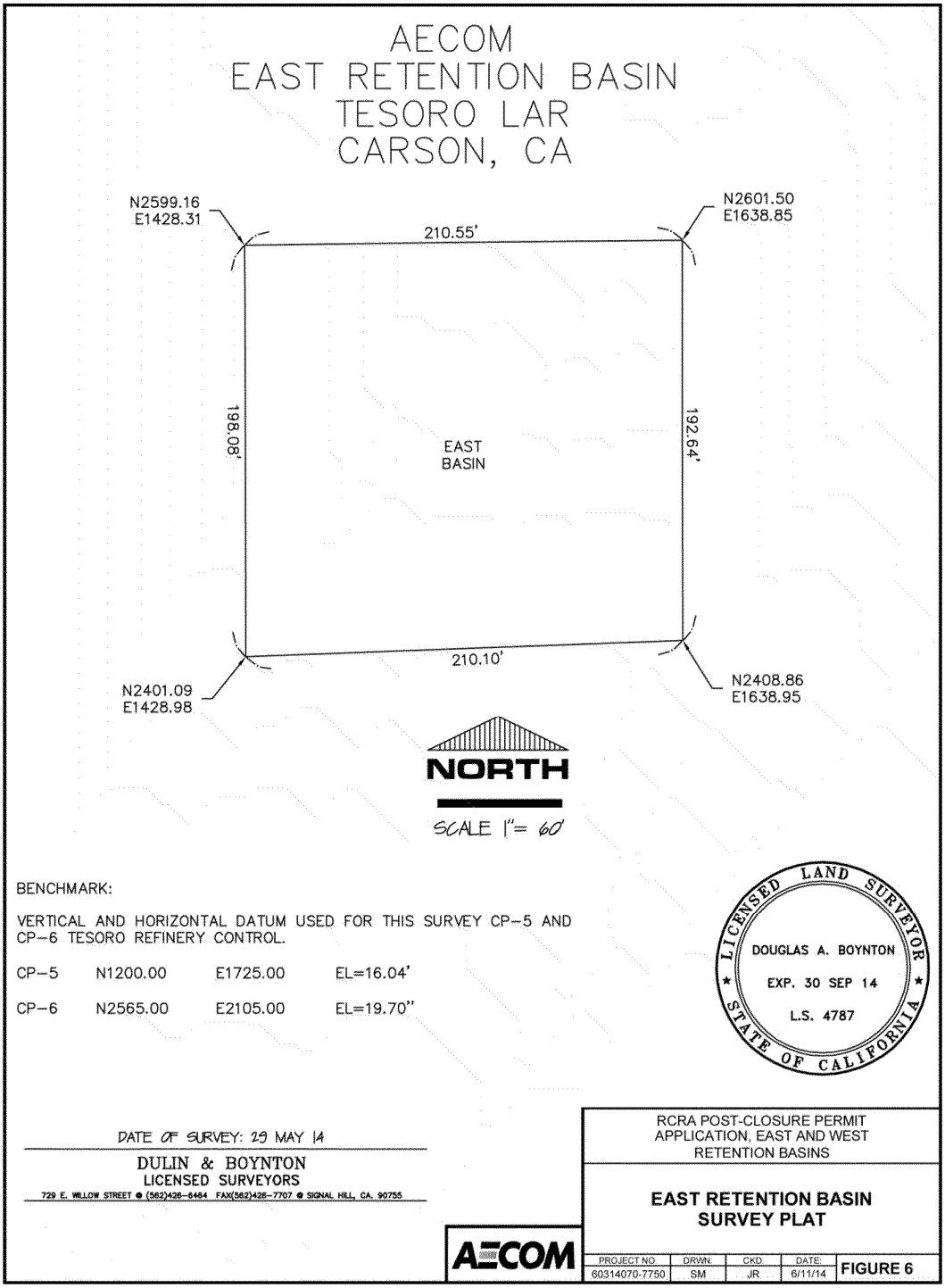



Figure 6 (Figure F-4 of the Permit Application)

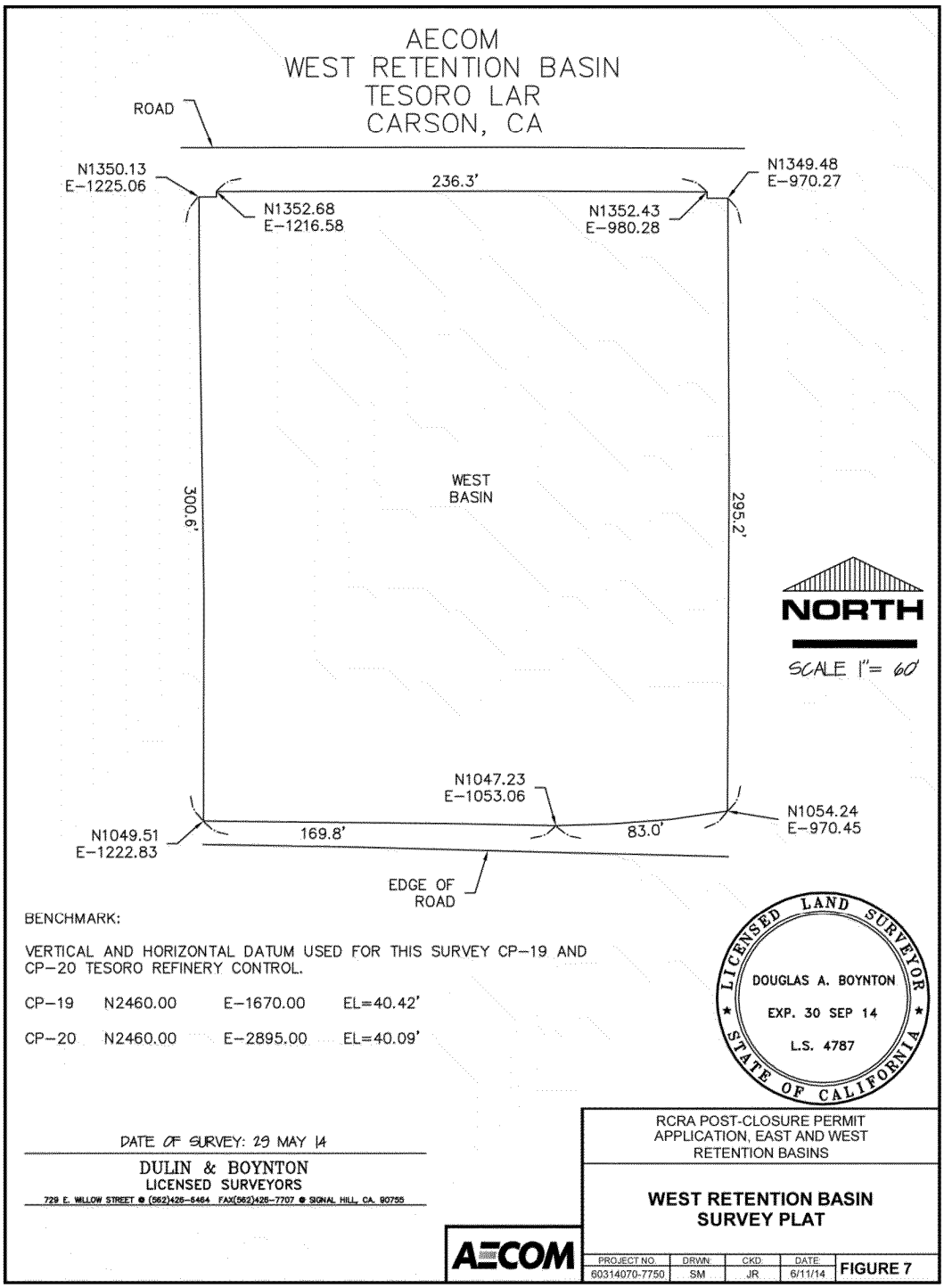



Figure 7 (Figure F-5 of the Permit Application)

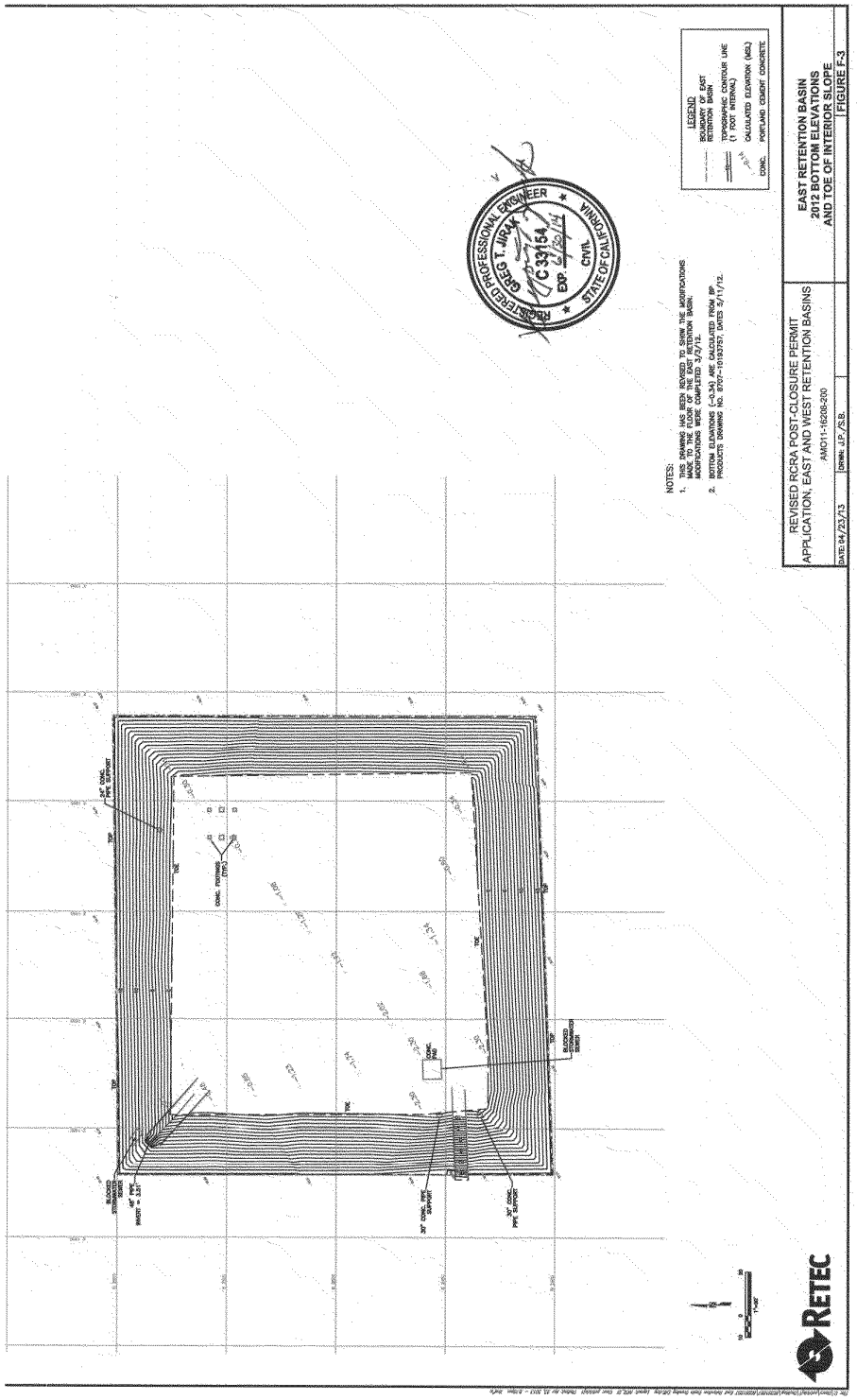
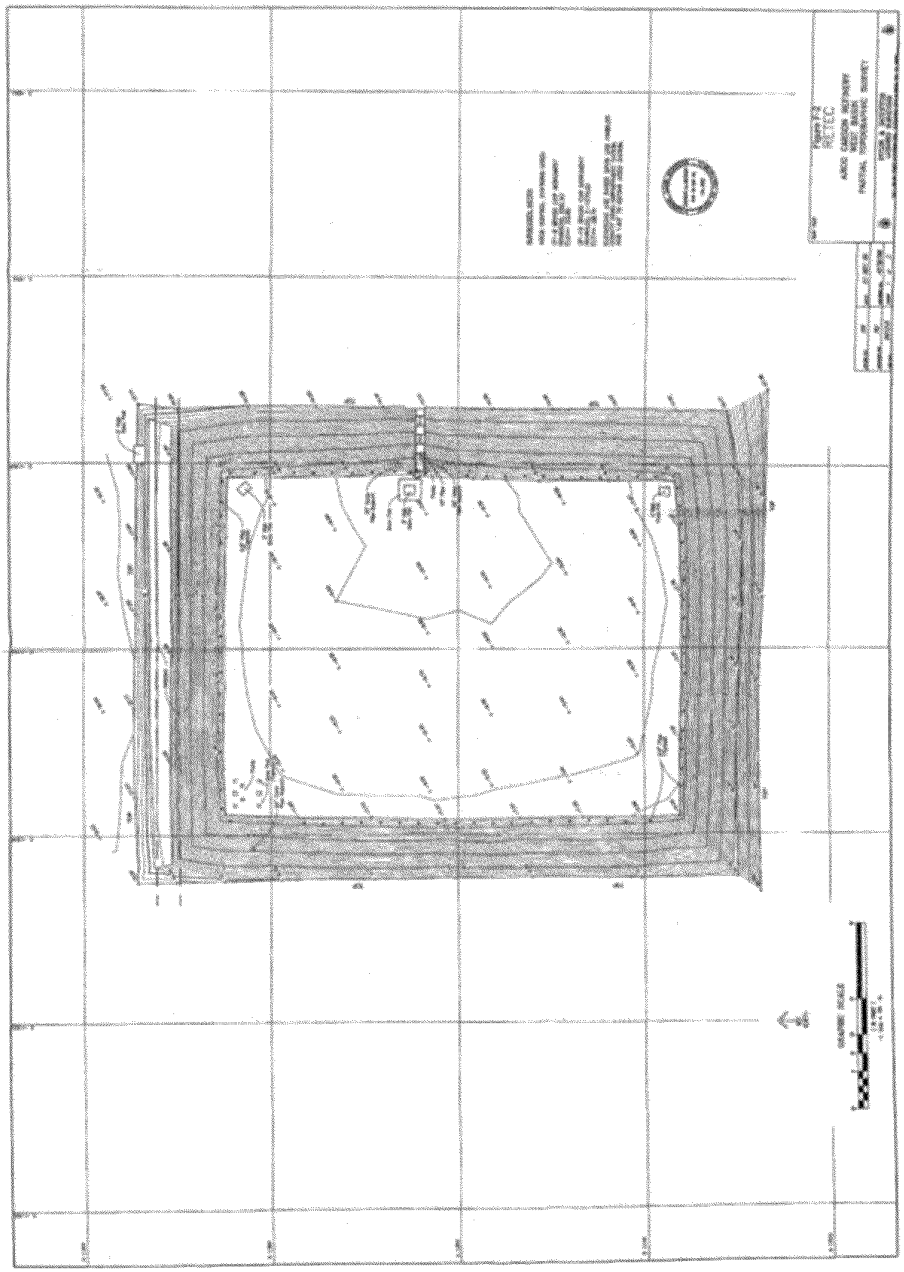



Figure 8 (Figure F-3 of the Permit Application)

Figure 9 (Figure F-2



**To:** Kateri.A.Luka@tsocorp.com[Kateri.A.Luka@tsocorp.com]; Nguyen, Robert T (Robert.T.Nguyen@tsocorp.com)[Robert.T.Nguyen@tsocorp.com]
**Cc:** Eshaghian, Mike@DTSC[Mike.Eshaghian@dtsc.ca.gov]; Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]; Zhang, Yun@DTSC[Yun.Zhang@dtsc.ca.gov]; Sally.Bilodeau@aecom.com[Sally.Bilodeau@aecom.com]; Kou, Roberto@DTSC[Roberto.Kou@dtsc.ca.gov]; Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]; Schievelbein, Kathie@DTSC[Kathie.Schievelbein@dtsc.ca.gov]; Ramirez, Larry@DTSC[Larry.Ramirez@dtsc.ca.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Thur 10/15/2015 3:34:05 PM
**Subject:** Post Closure Permit Decision for Tesoro Refining and Marketing Comoany, Carson Refinery
Notice Permit Decision.pdf
Permit Letter to Tesoro Carson 10-15-2015.pdf
Tesoso Carson Final Post Closure Permit Color 10-15-2015.pdf

Kateri and Robert,

The California Department of Toxic Substances Control (DTSC) has made a final decision to issue a Hazardous Waste Facility Post Closure Permit for the East and West Retention Basins at Tesoro Refining & Marketing Company LLC, Carson Refinery, 1801 East Sepulveda Boulevard in Carson, California. The Notice of Final Permit Decision and the Post Closure Permit is enclosed. The full document is in the mail.

DTSC would like to thank everyone who participated in this permitting process. Please bring this notice to the attention of all persons whom you know would be interested in this matter. If you have any questions about this Notice, please contact Mike Eshaghian at (818) 717-6679.

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

October 15, 2015

NOTICE OF FINAL HAZARDOUS WASTE FACILITY POST-CLOSURE PERMIT DECISION FOR THE EAST AND WEST RETENTION BASINS, TESORO REFINING & MARKETING COMPANY, CARSON REFINERY, 1801 E. SEPULVEDA BOULEVARD, CARSON, CALIFORNIA
EPA ID NUMBER CAD 077227049

To Interested Parties:

The California Department of Toxic Substances Control (DTSC) has made a final decision to issue a Hazardous Waste Facility Post Closure Permit for the Tesoro Refining & Marketing Company LLC, Carson Refinery located at 1801 East Sepulveda Boulevard in Carson, California. The Final Post Closure Permit is issued by DTSC in accordance with the California Code of Regulations, title 22, sections 66264.112 and 66271.14.

In accordance with California Code of Regulations, title 22, section 66270.42(c), DTSC sent a notice of the Post Closure Permit to all persons on the facility mailing list and appropriate units of State and local government. Public notices were placed in the Daily Breeze and La Opinion on August 12, 2015 and a radio announcement were also made on JACK FM 93.1 KCBS and KLOX-FM MEGA 93.6. The public comment period for the draft Post Closure Permit started on August 12, 2015 and ended on September 30, 2015. A Public Meeting was held on August 27, 2015 at 6:00 p.m. at the Carson Community Center, North Entrance, Room 111, 801 E. Carson Street, Carson, California 90745. DTSC received two comments from the community. DTSC responded to all comments.

DTSC will also file a Notice of Exemption for the Post Closure Permit to comply with the California Environmental Quality Act.

The final Permit is issued by DTSC on October 15, 2015 in accordance with the California Code of Regulations, title 22, section 66271.14. The final Permit becomes effective on November 16, 2015. The final Permit may be appealed in accordance with California Code of Regulations, title 22, section 66271.18. Any person who filed comments on the draft Permit may petition the DTSC to review any condition of the permit decision.

Any person who failed to file comments on the draft Permit may petition for administrative review only to the extent of the changes from the draft Permit to the final Permit.

The 30-day period within which a person may request review begins on

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October 15, 2015 and ends on November 15, 2015. The petition must be sent to:

The Appeals Officer
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California - 95826

with a complete copy to:

Mr. Phil Blum, P.E.
Office of Permitting
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

The appeals can also be filed electronically at appeals@dtsc.ca.gov but signed original must be sent by mail, postmarked by the end of the due date November xx, 2015.The petition shall include a statement of the reasons supporting the request for review, including a demonstration that any issues being raised were raised during the public comment period and when appropriate, a showing that the condition in question is based on:

1) a finding of fact or conclusion of law which is clearly erroneous, or

2) an exercise of discretion or an important policy consideration which DTSC should review.

A copy of the complete administrative record for this final permit decision is available for review at:

Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Copies of the final Permit, Response to Comments, and the CEQA Notice of Exemption, are available for review at:

Carson Regional Public Library
151 E. Carson Street
Carson, California 90745

Wilmington Library
1300 N. Avalon Blvd.
Wilmington, CA 90744

These documents are also available at the DTSC Envirostor website:
http://www.envirostor.dtsc.ca.gov/public/
Enter "Carson" as the City and select Tesoro Refining and Marketing Company, Carson Refinery. Click on the link for "Report" and then on the button for "Community Involvement". You may also use the following link:

http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD077227049

DTSC would like to thank everyone who participated in this permitting process. Please bring this notice to the attention of all persons whom you know would be interested in this matter. If you have any questions about this Notice, please contact Mike Eshaghian at (818) 717-6679.

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

October 15, 2015

Mr. Robert Nguyen
Environmental Manager
Tesoro Refining & Marketing Company LLC
Los Angeles Refinery Carson Operations
Carson One Campus, MC 446G
2350 East 223rd Street.
Carson, California 90810

FINAL POST CLOSURE PERMIT RENEWAL, EAST AND WEST RETENTION BASINS, TESORO REFINING & MARKETING COMPANY, CARSON REFINERY, 1801 E. SEPULVEDA BOULEVARD, CARSON, CALIFORNIA
EPA ID NUMBER CAD 077227049

Dear Mr. Nguyen:

The California Environmental Protection Agency, Department of Toxic Substances Control has made a final decision to issue a Hazardous Waste Post Closure Permit for the Tesoro Refining & Marketing Company LLC, Carson Refinery located at 1801 East Sepulveda Boulevard in Carson, California.

In accordance with California Code of Regulations, title 22, section 66270.42(c), DTSC sent a notice of the draft Post Closure Permit to all persons on the facility mailing list and appropriate units of State and local government. Public notices were placed in the Daily Breeze and La Opinion on August 12, 2015 and a radio announcement were also made on JACK FM 93.1 KCBS and KLOX-FM MEGA 93.6. The public comment period for the draft Post Closure Permit started on August 12, 2015 and ended on September 30, 2015. A Public Meeting was held on August 27, 2015 at 6:00 p.m. at the Carson Community Center, North Entrance, Room 111, 801 E. Carson Street, Carson, California 90745.

DTSC received two comments from the community. A response to the comment is attached.

DTSC will also file a Notice of Exemption for the Post Closure Permit to comply with the California Environmental Quality Act.

The final Permit is issued by DTSC on October 15, 2015 with the effective date of November 16, 2015 in accordance with the California Code of Regulations, title 22,

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section 66271.14. The following documents are enclosed: Notice of Final Permit Decision, Final Hazardous Waste Post Closure Facility Permit, and the Response to Comments.

If you have any questions regarding this letter, please contact the undersigned at (818) 717-6679.

Sincerely,

Mike Eshaghian

Mike Eshaghian
Project Manager
Office of Permitting

Enclosures

cc: Ms. Kateri Luka
Tesoro Refining & Marketing Company LLC
Los Angeles Refinery Carson Operations
Carson One Campus, MC 446G
2350 East 223rd Street.
Carson, California 90810

Ms. Sally Bilodeau, PG, CEG, CHG
AECOM
1220 Avenida Acaso
Camarillo, California 93012-8750

Mr. Mike Zabaneh, P.E.
Environmental Engineer/Project Manager
RCRA Permits Office
Lands Division
US EPA Region 9
Mail Code LND-4-2
75 Hawthorne Street
San Francisco, CA 94105

Mr. Phil Blum, P.E.,
Unit Supervisor
Permitting Branch
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Mr. Yun Zhang, P.G.
Geological Services Unit
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Ms. Kathie Schievelbein
Environmental Analysis and Regulations
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Mr. Roberto Kou
Enforcement and Emergency Response Program
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Mr. Larry Ramirez
Department of Toxic Substances Control
Enforcement and Emergency Response Division
1515 Tollhouse Road
Clovis, California 93611

# California Environmental Protection Agency
# Department of Toxic Substances Control
# HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

**Facility Name:**
Tesoro Refining & Marketing
Company LLC, Carson Refinery
1801 E. Sepulveda Blvd.
Carson, California 90810

Facility EPA ID Number:
CAD077227049

Effective Date: November 16, 2015

Expiration Date: November 15, 2025

**Facility Owner Name:**
Tesoro Refining & Marketing Company LLC
2350 E. 223rd Street
Carson, California 90810

**Operator Name:**
Tesoro Refining & Marketing Company LLC
Carson Refinery
2350 E. 223rd Street
Carson, California 90810

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Post Closure Facility Permit is hereby issued to: Tesoro Refining & Marketing Company LLC, Carson Refinery.

The issuance of this Permit is subject to the terms and conditions set forth in the Approved Post Closure Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions dated June 17, 2014, July 7, 2014 and December 9, 2014. The Permit consists of 27 pages.

Phil Blum, P.E.
Office of Permitting
Department of Toxic Substances Control

Date: October 15, 2015

**TESORO REFINING & MARKETING COMPANY LLC**
**CARSON REFINERY**
**1801 E. SEPULVEDA BLVD.**
**CARSON, CALIFORNIA 90810**
**HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT**
**EAST AND WEST RETENTION BASINS**
**EPA ID NUMBER CAD 077227049**

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. **Owner of Facility**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

2. **Owner of Real Property**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

3. **Operator of Facility**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

4. **Location**

The Tesoro Refining & Marketing Company LLC, Carson Refinery (Facility) is located at 1801 East Sepulveda Boulevard in Carson, California. Also the Facility has been using the 2350 E. 223rd Street, Carson, California 90810 address since their administrative Offices are in the main Campus Building.

The Facility is within Township 4 South, Range 13 West; Section 21. The assessor's parcel number is: 7315-006-003. The Refinery and most of the surrounding area are zoned for heavy manufacturing. As shown on Figure 1, the Facility is bordered by Wilmington Avenue to the west, 223rd Street on the north, Dominguez Channel and Alameda Street on the east and Sepulveda Boulevard on the south. Surrounding land use is primarily heavy manufacturing except for two areas. South of Sepulveda Boulevard and west of Wilmington Avenue are single family residences. North of 223rd Street and along the 405 freeway there are commercial automotive businesses.

The Facility is located in five separate geographic areas: the Main Refinery, the North Property, the Northeast Property, the Southeast Property, and the Southwest Property, which was formerly called the Southwest Tank Farm (Figure 2). Three roads—Sepulveda Boulevard, Wilmington Avenue, and Alameda Street—and the Dominguez Channel bound the majority of the Refinery. Most refining operations are conducted within the Main Refinery and the North Property. The Northeast Property

is located north and east of the Dominguez Channel; the Southeast Property is located east of Alameda Street; and the Southwest Property is located south of Sepulveda Boulevard. The current total area of the five geographical areas is approximately 702 acres (Figure 2).

The North Property consists of refining facilities, a warehouse, and shops. The Main Refinery consists of refining facilities, a cogeneration plant, and the majority of the Refinery's product shipping facilities and product storage area, referred to as the Main Tank Farm. The Northeast Property includes the Northeast Tank Farm, contractor parking and staging, and an employee athletic field. There is also a polypropylene unit in this area which is owned by a separate party. The northern half of the Southeast Property is used for coke storage. Most of the southern half of the Southeast Property is used for parking and vehicle storage. The Carson Product Terminal is located off site to the east (Figure 2).

The Southwest Property occupies an area of about 90 acres. Previous property owners used the Southwest Property for the bulk storage of liquid hydrocarbons in concrete-lined reservoirs. These former reservoirs were last used in 1970. The eastern half of the Southwest Property has been paved and is currently being leased for shipping container storage. The Carson Crude Terminal is located off site to the south (Figure 2).

The East and West Retention Basins, for which this RCRA Post-closure Permit Application (Application) was prepared, are located within the Main Refinery (shown in Figures 1, 2, 3 and 4).

## 5. Description of Facility Operations

The Facility is situated in a predominantly industrial area and is surrounded by a variety of manufacturing and petroleum-refining and storage facilities. The Facility currently has the capacity to process approximately 260,000 barrels of crude oil per day to make gasoline, jet fuel, diesel, liquefied petroleum gas (LPG), sulfur, and petroleum coke. A cogeneration plant, located on site, produces power to supply the Refinery and to export to utilities.

The Facility operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

## 6. Facility History

Petroleum refining operations have been conducted at the site since 1923 when the Pan American Petroleum Company began operations. In 1937, Richfield Oil Corporation purchased the property and expanded the refining operations. Additional parcels of land, purchased from 1937 through 1945, were added to the Refinery. The Atlantic Refining Company and the Richfield Oil Corporation merged in 1966. In 2000, BP America Inc. acquired Atlantic Richfield Company. As a result, the name of the Refinery was changed to the BP West Coast Products, Carson Refinery in 2002. In June 2013, the BP West Coast Products, Carson Refinery was sold to Tesoro Refining & Marketing Company LLC (Tesoro).

The East and West Retention Basins became regulated under RCRA on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Facility historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter. The Retention Basins were granted interim status on September 25, 1990.The Facility initiated closure procedures for the Retention Basins with submittal of a closure plan in 1993. A revised closure plan was submitted in 1994. In 1995, the Interim Status Closure and Post-Closure Plan, Revision 2 was submitted.

On December 4, 1997, DTSC approved the closure certification of the East and West Retention Basins. The Facility submitted a Post-Closure Permit Application for the Retention Basins on May 21, 1998 and a subsequent revision in December 2002. DTSC issued the "Final Hazardous Waste Facility Post-Closure Permit" for the Retention Basins on December 24, 2003 with the effective date of January 26, 2004. BP West Coast Products submitted a Post Closure Permit Renewal Application on September 27, 2012.

A Class 1* Post Closure Permit Modification was issued on August 5, 2013 for the change of ownership to Tesoro Refining & Marketing Company. On November 25, 2013, Tesoro submitted a Revised Post Closure Permit Application dated September 2013 due to the change of ownership. Subsequent revisions to the Application were submitted on June 17, 2014, July 7, 2014 and December 9, 2014 in response to DTSC comments.

## 7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility shall be deemed to have started from the effective date of this Post Closure Permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

## PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

The revised Part "A" Application dated November 7, 2013 and the DTSC-approved revised Post Closure Permit Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions submitted on June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) are hereby made a part of this Permit by reference.

2. EFFECT OF PERMIT

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.

(b) The Permittee is permitted to operate, monitor and maintain this Facility post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes in the East and West Retention Basins not specifically authorized in this Permit or otherwise authorized by DTSC is strictly prohibited.

(c) Compliance with the terms and conditions of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., tit. 22, §66270.43).

(g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards (RWQCB) and any conditions imposed pursuant to section 13227 of the Water Code.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in California Code of Regulations, title 14, section 15070 et seq.

4. ENVIRONMENTAL MONITORING

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6.

(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility are those described in Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application.

(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1 of the Approved Application.

(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility are described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.1; of the Approved Application. During future sampling events, if the Facility finds constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Facility shall add them to the list of COCs.

(d) For the purpose of California Code of Regulations, title 22, section 66264.94, the Concentration Limits for the Facility are described in Appendix 6, RCRA

Basins Groundwater Monitoring Plan, section 2.1.1 of the Approved Application.

(e) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 4.1 of the Approved Application.

(f) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility are described in Appendix 3a, RCRA Retention Basins Post Closure Plan, section 2.2 of the Approved Application; and Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.2 of the Approved Application.

(g) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.3 of the Approved Application and shall be 30 years beginning with the date of the issuance of this post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

(h) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility is described in Appendix 6, RCRA Retention Basins Groundwater Monitoring Plan, section 4.0 of the Approved Application. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application.

(i) The Facility shall comply with the requirements of the Los Angeles Regional Water Quality Control Board (LARWQCB) issued Cleanup and Abatement Order (CAO) No. 90-121 to Atlantic Richfield Company and any subsequent Order. Requirements of the CAO included identification of sources, delineation of plumes, recovery of light non-aqueous phase liquid (LNAPL) throughout the site, and initiation of dissolved-plume cleanup.

5. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).

6. ACCESS

(a) DTSC, its contractors, employees, agents, and/or any United States Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance of the unit and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit, other than those specified in this Part IV, unless otherwise authorized by DTSC. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of California Code of Regulations, title 22, section 66270.1(c) and other similar, unit-specific regulatory requirements, this Facility has two Post Closure Hazardous Waste Management Units for the purpose of this Permit. The two Post Closure units are East and West Retention Basins. The Refinery operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Refinery's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District. The Retention Basins became regulated under the RCRA on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Refinery historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter. The East and West Retention Basins are the regulated units that are under post-closure care. These units are described in detail in the Approved Application and are as follows:

UNIT NAME:

The East Retention Basin

LOCATION:

The East Retention Basin is located within the Main Refinery (shown in Figures 1, 2, 3, 4, 5, 6 and 8). The East Retention Basin site was the location of a lube oil plant and boiler house. The East Retention Basin was constructed in 1969 and closed in 1997.

ACTIVITY TYPE:

Groundwater monitoring; operation and maintenance activities; site inspection.

ACTIVITY DESCRIPTION:

The activities include groundwater monitoring, site inspections, repair and maintenance of the monitoring wells and the East ~~and West~~ Retention Basin~~s~~ as described in Appendix 6 of the Approved Application. Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with the Retention Basin include the Basin walls, liners, and pumps.

The Facility has an extensive groundwater monitoring network and past and planned remediation activities. From 2013, the post closure groundwater monitoring program has been expanded to seven (7) wells to be gauged and four (4) wells to be sampled as indicated in the following table:

East Retention Basin Wells
AMR/601-D (gauging)
AMR/602-D (gauging)
AMR/603-D (gauging)
AMR/604-D (monitoring –Point of Compliance (POC))
AMR/605-D (monitoring -POC)
AMR/611-D (monitoring -POC)
AMR/613-D (monitoring -POC)

Locations of the groundwater monitoring wells are shown in Figures 4 and 5. Groundwater samples are collected semiannually, in or near April and October of each year, from the following wells at the East Retention Basin:

East Retention Basin: AMR/604-D, AMR/605-D, AMR/611-D, and AMR/613-D

If LNAPL is detected when gauging any of these wells, no sample is collected from that well. Groundwater samples collected from the East Retention Basin~~s~~ monitoring wells are analyzed using current US EPA Methods for the following routine constituents: Volatile organic compounds (VOCs) (including benzene, ethyl benzene, toluene, and xylene, fuel oxygenates, and ethanol) ; and total petroleum hydrocarbons (TPHs) .
In addition to the above routine constituents, groundwater samples collected from the Retention Basin wells will be analyzed for Appendix IX constituents every 5 years.

PHYSICAL DESCRIPTION:

The East Retention Basin~~s~~ was constructed in 1969 with 4 inches of gunite sprayed over 4-inch by 4-inch steel mesh. The concrete walls and floors of the Retention Basin~~s~~ were then coated with primer coat and an impervious, chemically resistant, epoxy topcoat. In 2012, a portion of the floor of the East Retention Basin was filled in with crushed miscellaneous base covered with 6 inches of steel-reinforced concrete. The East Retention Basin was

filled to an average depth of 5 feet. The concrete was sealed consistent with the original Retention Basin design with a primer coat and an impervious, chemically resistant, epoxy topcoat. The East Retention Basin is 200 feet by 210 feet with an average depth of 19 feet. See Figures 6 and 8.

MAXIMUM CAPACITY:

The East Retention Basin has a useable volume of 4,320,000 gallons, which allows for 1 foot of freeboard.

WASTE SOURCES:

The Facility historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded TCLP criterion for benzene (D018) of 0.5 milligrams per liter.

WASTE TYPES:

The Facility operates the East Retention Basins as a surface impoundment for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basin is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

RCRA WASTE CODES:

Benzene: D018

UNIT NAME:

West Retention Basin

LOCATION:

The West Retention Basins is located within the Main Refinery (shown in Figures 1, 2, 3, 4, 5, 7 and 9). The West Retention Basin site was historically used to manage wastewater and slop oil. The West Retention Basin was constructed in 1969 and closed in 1997.

ACTIVITY TYPE:

Groundwater monitoring; operation and maintenance activities; site inspection.

ACTIVITY DESCRIPTION:

The activities include groundwater monitoring, site inspections, repair and maintenance of the monitoring wells and the West Retention Basin as described in Appendix 6 of the Approved Application. Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with the Retention Basin include the Basin walls, liners, and pumps.

The Facility has an extensive groundwater monitoring network and past and planned remediation activities. From 2013, the post closure groundwater monitoring program has been expanded to six (6) wells to be gauged and three (3) wells to be sampled as indicated in the following table:

West Retention Basin Wells

AMR/606-D (gauging)
AMR/607-D (monitoring -POC
AMR/608-D (monitoring -POC)
AMR/609-D (gauging)
AMR/610-S (gauging)
AMR/612-D (monitoring upgradient)

Locations of the groundwater monitoring wells are shown in Figure 4 and 5. Groundwater samples are collected semiannually, in or near April and October of each year, from the following wells at the West Retention Basin:

West Retention Basin: AMR/607-D, AMR/608-D, and AMR/612-D

If LNAPL is detected when gauging any of these wells, no sample is collected from that well. Groundwater samples collected from the West Retention Basin monitoring wells are analyzed using current US EPA Methods for the following routine constituents: Volatile organic compounds (VOCs) (including benzene, ethyl benzene, toluene, and xylene, fuel oxygenates, and ethanol) ; and total petroleum hydrocarbons (TPHs) .
In addition to the above routine constituents, groundwater samples collected from the Retention Basin wells will be analyzed for Appendix IX constituents every 5 years.

PHYSICAL DESCRIPTION:

The West Retention Basin was constructed in 1969 with 4 inches of gunite sprayed over 4-inch by 4-inch steel mesh. The concrete walls and floors of the Retention Basins were then coated with primer coat and an impervious, chemically resistant, epoxy topcoat. The West

Retention Basin is 269 feet by 300 feet with an average depth of 22 feet. See Figures 7 and 9.

MAXIMUM CAPACITY:

The West Retention Basin has a useable volume of 10,230,000 gallons, which allows for 1 foot of freeboard.

WASTE SOURCES:

The Facility historically used the Retention Basin for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basin stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter.

WASTE TYPES:

The Facility operates the West Retention Basin as a surface impoundment for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

RCRA WASTE CODES:

Benzene: D018

## PART V. SPECIAL CONDITIONS

(a) The Permittee shall comply with the requirements of the LARWQCB issued CAO No. 90-121 to Atlantic Richfield Company and any subsequent Order. The Permittee shall monitor the groundwater in accordance with the Order and any subsequent order and in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. The Permittee shall simultaneously provide to DTSC a copy of all the submittals required by the RWQCB.

(b) The Permittee shall comply with the Annual Report requirements specified in California Code of Regulations, title 22, chapter 14 and shall include the monitoring and response program data in its annual report. In addition, the Permittee shall submit a post closure semiannual groundwater monitoring report after each semiannual groundwater monitoring and sampling event to DTSC.

(c) Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with each Retention Basins include the Retention Basin walls, liners, and pumps

(d) The Permittee shall conduct annual groundwater monitoring and periodic site inspection, repair and maintenance activities during the post closure care period in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. Additional inspections will be performed after any earthquakes of sufficient magnitude or intensity to potentially cause damage to Retention Basin structures.

(e) The Permittee shall maintain the Retention Basins so that it is free of cracks, spalling, and gaps upon visual inspection of the liner. The Permittee shall immediately repair all cracks, spalling and gaps upon detection in the liner and/or the basal structure of the Retention Basins.

(f) When more than 3 feet of stormwater and/or non-hazardous wastewater have accumulated in a Retention Basin, the Permittee will collect a representative sample in laboratory supplied container (s) and analyze it for total benzene (D018) using USEPA Method 8260B. The results of the water analysis shall be included in a semiannual groundwater monitoring report submitted to DTSC. If a sample exceeds 0.5 mg/l of benzene, DTSC shall be notified by telephone or e-mail within 24 hours of receipt of the analytical results. Written notification accompanied by the certified analytical report will be provided within 7 days from the verbal or e-mail notification or seven days following receipt of the final laboratory report, whichever is later. The notification shall include but not be limited to the following:

1) Date of use;

2) Storage duration;

3) Volume of wastewater;

4) Analytical results of wastewater(If the sampling results shows benzene concentrations exceeding 0.5 mg/L, the report shall explain the reasons and sources of the higher benzene concentrations in the wastewater or storm water);

5) Air monitoring results if any;

6) Type of emergency which required the use of the Retention Basins.

(g) The Permittee shall not store any hazardous waste in the Retention Basins. The Permittee shall immediately test storm water in the Retention Basins following an emergency or use and commence immediate pumping of the storm, after sampling, back into the treatment systems when capacity is available. The Permittee shall follow the notification requirements specified in item (g). If the sludge is determined to be a hazardous waste, the Permittee shall send it offsite for treatment or disposal at an authorized hazardous waste treatment or disposal facility.

(h) The Permittee shall maintain a minimum of 1-foot of freeboard when the Retention Basins are in use.

(i) The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1. The Annual Groundwater Monitoring and Response Program Report may be submitted simultaneously to DTSC and RWQCB by each March 1.

(j) Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 360 days of the approval of this Permit, the Permittee shall have a DTSC-approved Land Use Covenant signed and recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement by check payable to the Department of Toxic Substances Control and shall be sent to: Accounting Unit, Department of Toxics Substances Control, P.O. Box 806, Sacramento, California 95812-0806. All checks shall reference the name and address of the Facility.

(k) The Permittee shall maintain the financial mechanism dated 3/23/2015 that was approved by DTSC for a total of $29,636,000 ($10,660,000 is for post closure as it is calculated in Appendix 5, Table 8, Post-Closure Cost Estimate Financial Assurance Documentation of the approved Application and the balance is maintained for corrective action) to demonstrate financial assurance for post closure and corrective action.

## PART VI. CORRECTIVE ACTION

A. SUMMARY OF THE CORRECTIVE ACTION AND GROUNDWATER REMEDIATION

The Facility performed early investigation and remediation activities as voluntary actions from the mid-1970s to mid-1980s. In 1985, Los Angeles area refineries were issued orders by the LARWQCB to investigate and initiate cleanups. Order No. 85-17, issued to Atlantic Richfield Company, required subsurface investigation and reporting. The Facility was already meeting most of the subsurface investigation requirements of the Order; however, in response to the Order, the Facility initiated a groundwater monitoring program and began submitting reports on a quarterly, and subsequently a semiannual, basis to the LARWQCB.

In 1990, the LARWQCB issued Cleanup and CAO No. 90-121 to Atlantic Richfield Company. Requirements of the CAO included identification of sources, delineation of plumes, recovery of LNAPL throughout the site, and initiation of dissolved-plume cleanup. Consistent with the CAO (and SB 1082), site-wide groundwater corrective action is conducted under the oversight of the LARWQCB.

The Facility, along with other members of the Carson Regional Groundwater Group (CRGG), embarked on a 4-year groundwater modeling program to develop a better understanding of groundwater flow. The U.S. Environmental Protection Agency (USEPA) and the LARWQCB have been involved in the oversight of these efforts. Fluid levels throughout the refinery are measured in wells to monitor changes in groundwater elevation and gradient, and to monitor for new occurrences of LNAPL. LNAPL is being monitored semiannually and recovered from on-site wells Potential sources of LNAPL continue to be investigated and characterized.

B. CORRECTIVE ACTION CONDITIONS

1. The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the LARWQCB pursuant to the Cleanup and CAO No. 90-121 and any other subsequent orders or requirements by the LARWQCB or US EPA.

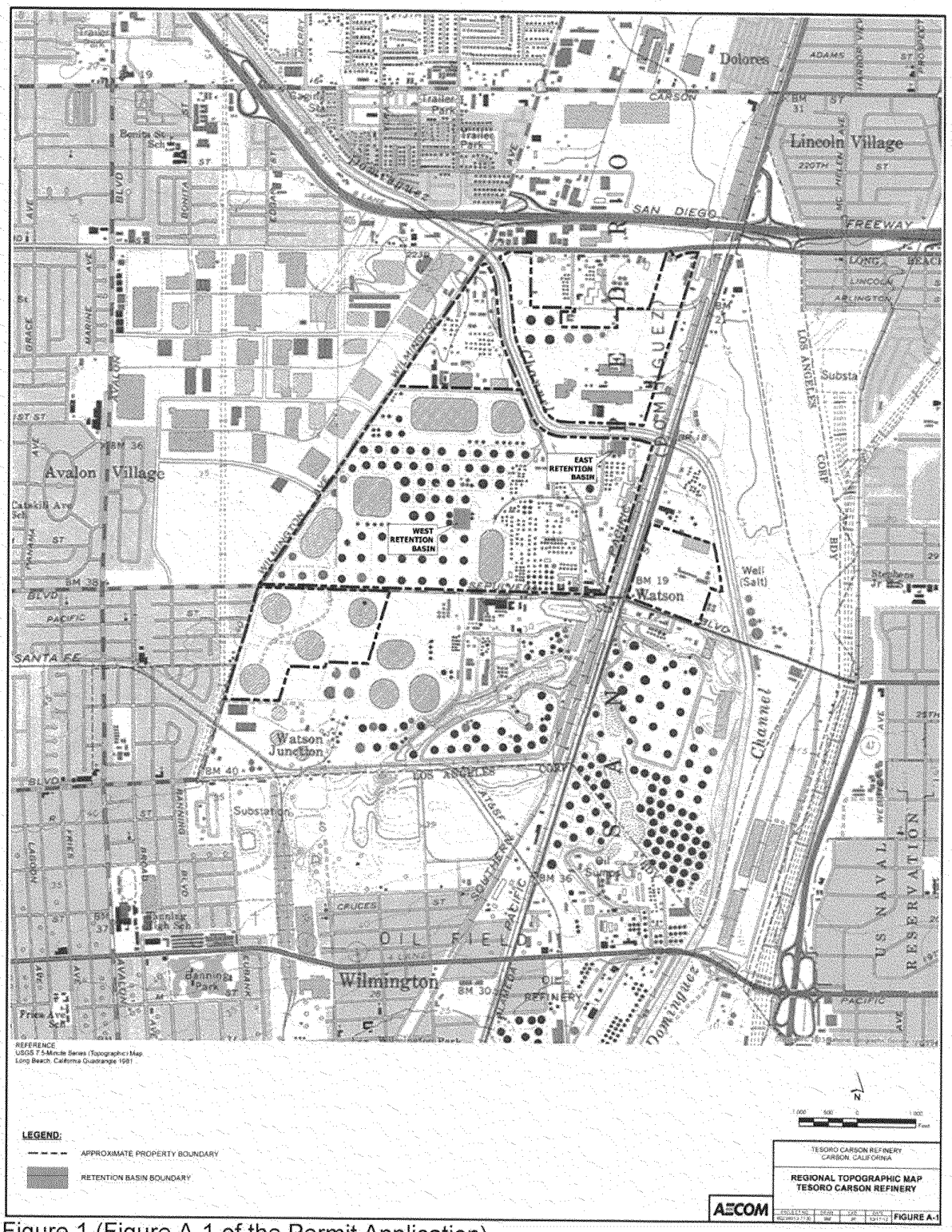
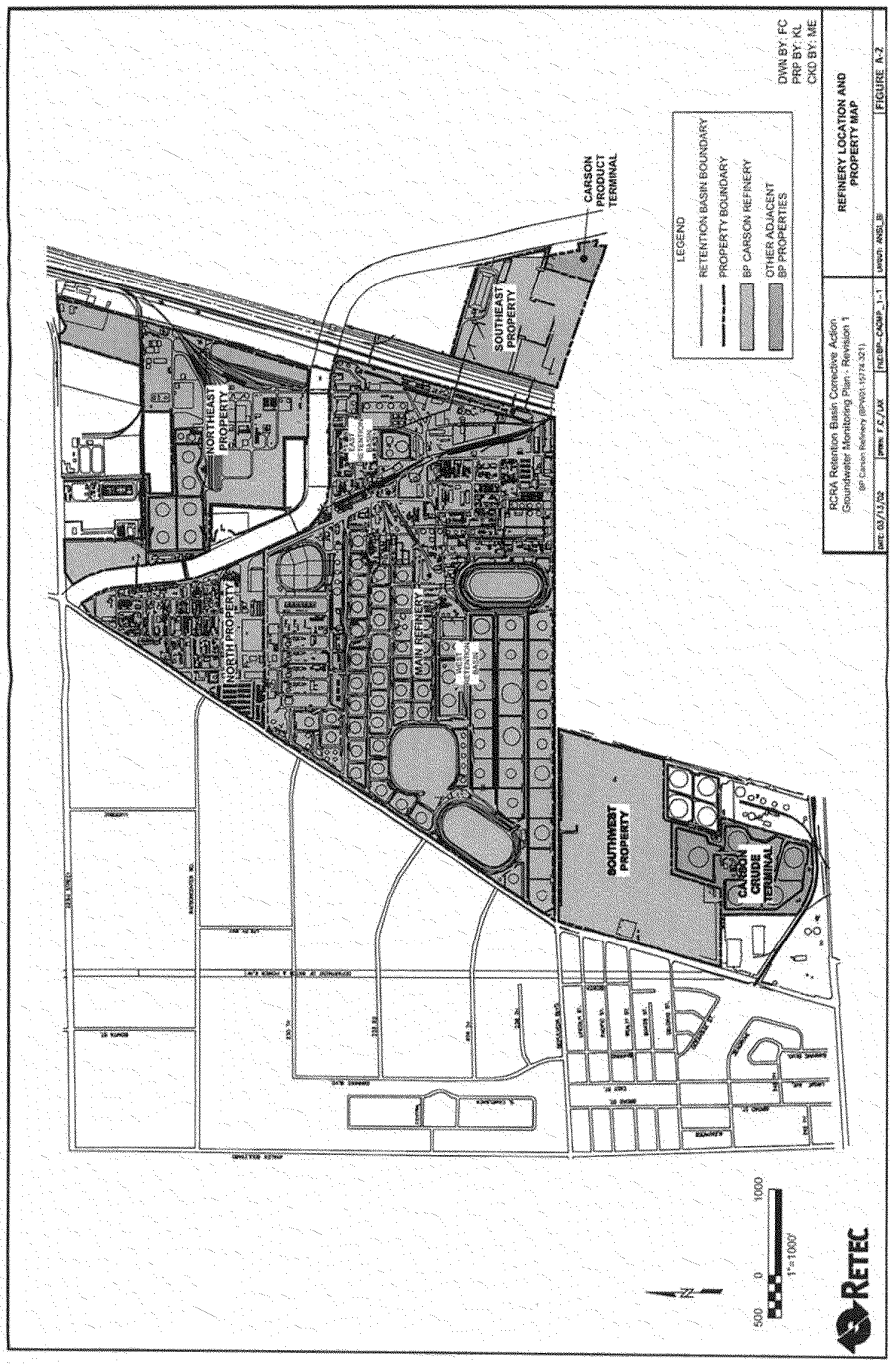



Figure 1 (Figure A-1 of the Permit Application)


CARSON PRODUCT TERMINAL
SOUTHEAST PROPERTY
NORTHEAST PROPERTY
NORTH PROPERTY
MAIN REFINERY
SOUTHWEST PROPERTY
CARSON CRUDE TERMINAL
LEGEND
RETENTION BASIN BOUNDARY
PROPERTY BOUNDARY
BP CARSON REFINERY
OTHER ADJACENT BP PROPERTIES
DWN BY: FC
PRP BY: KL
CKD BY: ME
REFINERY LOCATION AND PROPERTY MAP
FIGURE A-2
RCRA Retention Basin Corrective Action
Groundwater Monitoring Plan - Revision 1
BP Carson Refinery (BPW01-15774-321)
DATE: 03/13/02
DWN: F.C./LAX
FILE: BP-CADMP_1-1
LAYOUT: ANSI_B
500 0 1000
1"=1000'
RETEC

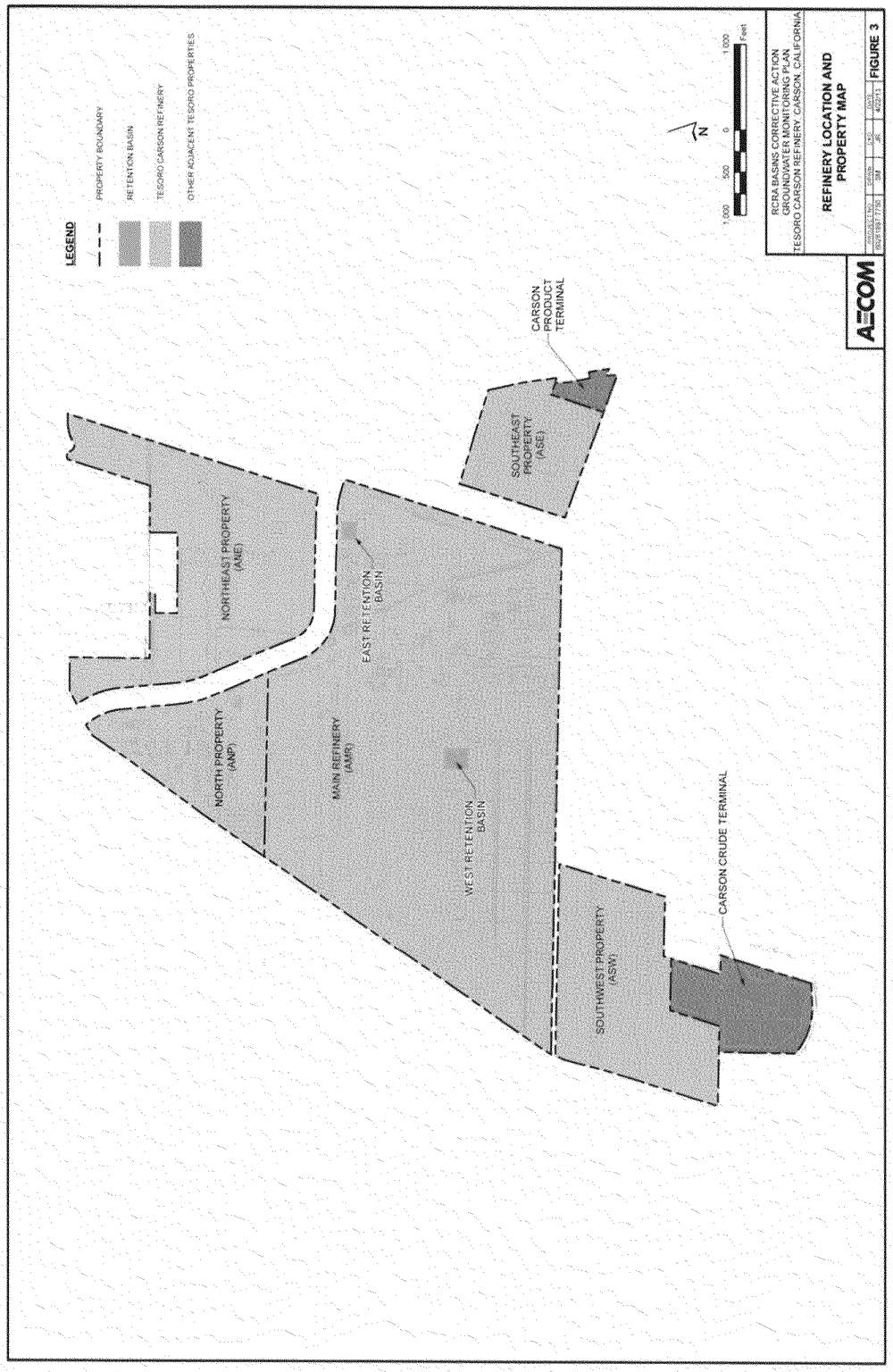



Figure 2 (Figure A-2 of the Permit Application)Figure 3 (Figure 1 of the Permit Application)

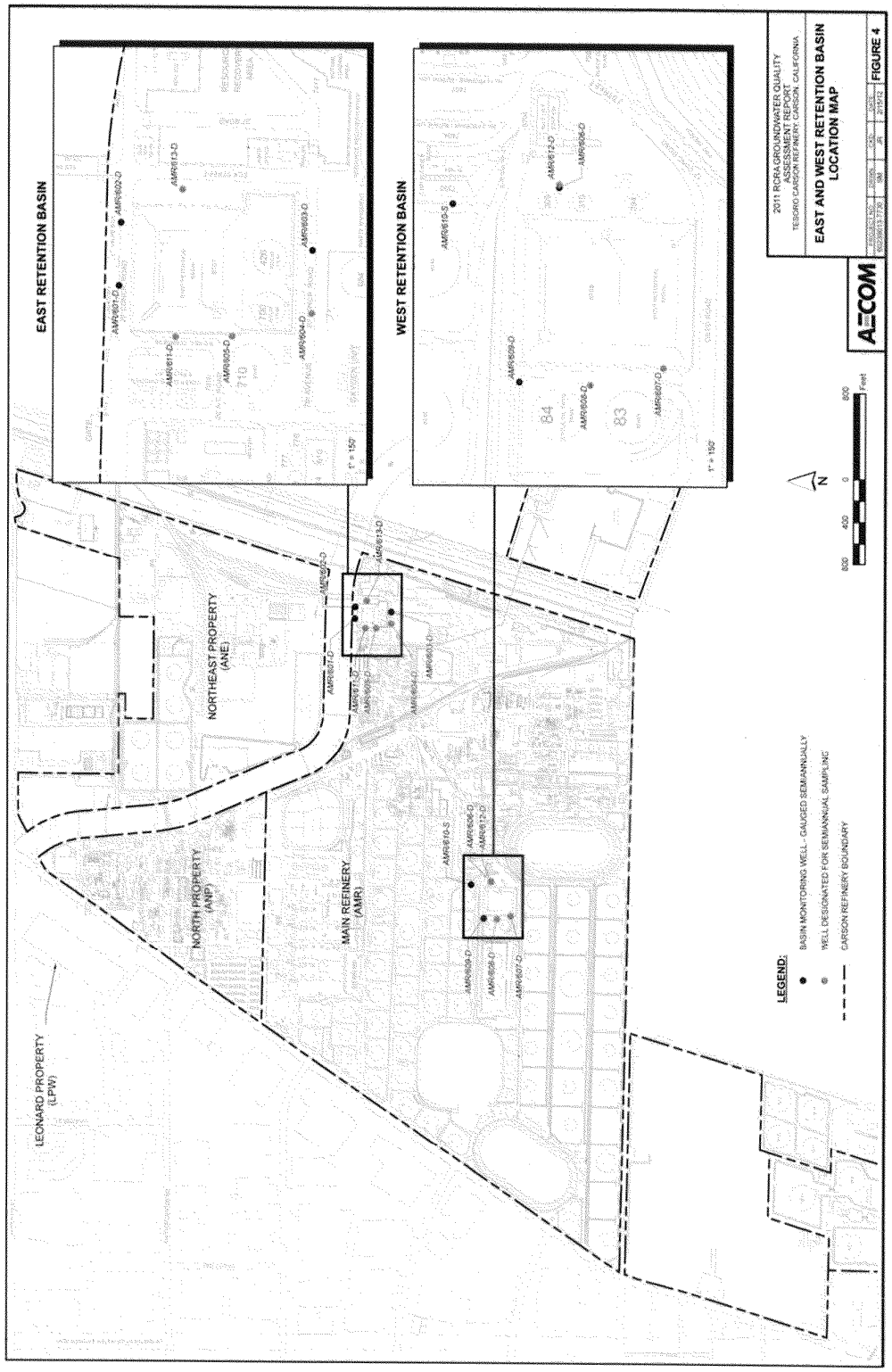



Figure 4 (Figure G-1 of the Permit Application)

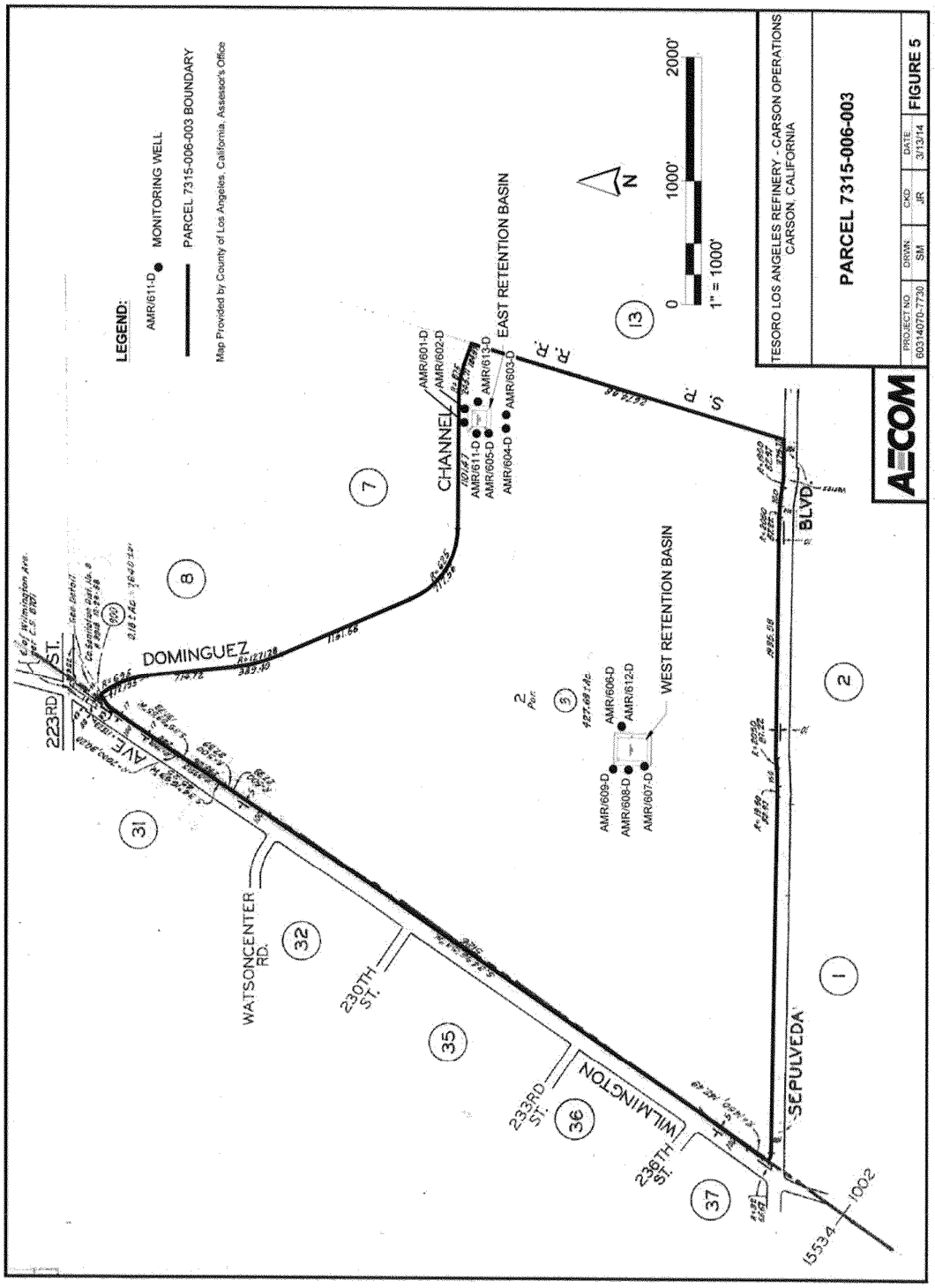



Figure 5 (Exhibit C of the Permit Application)

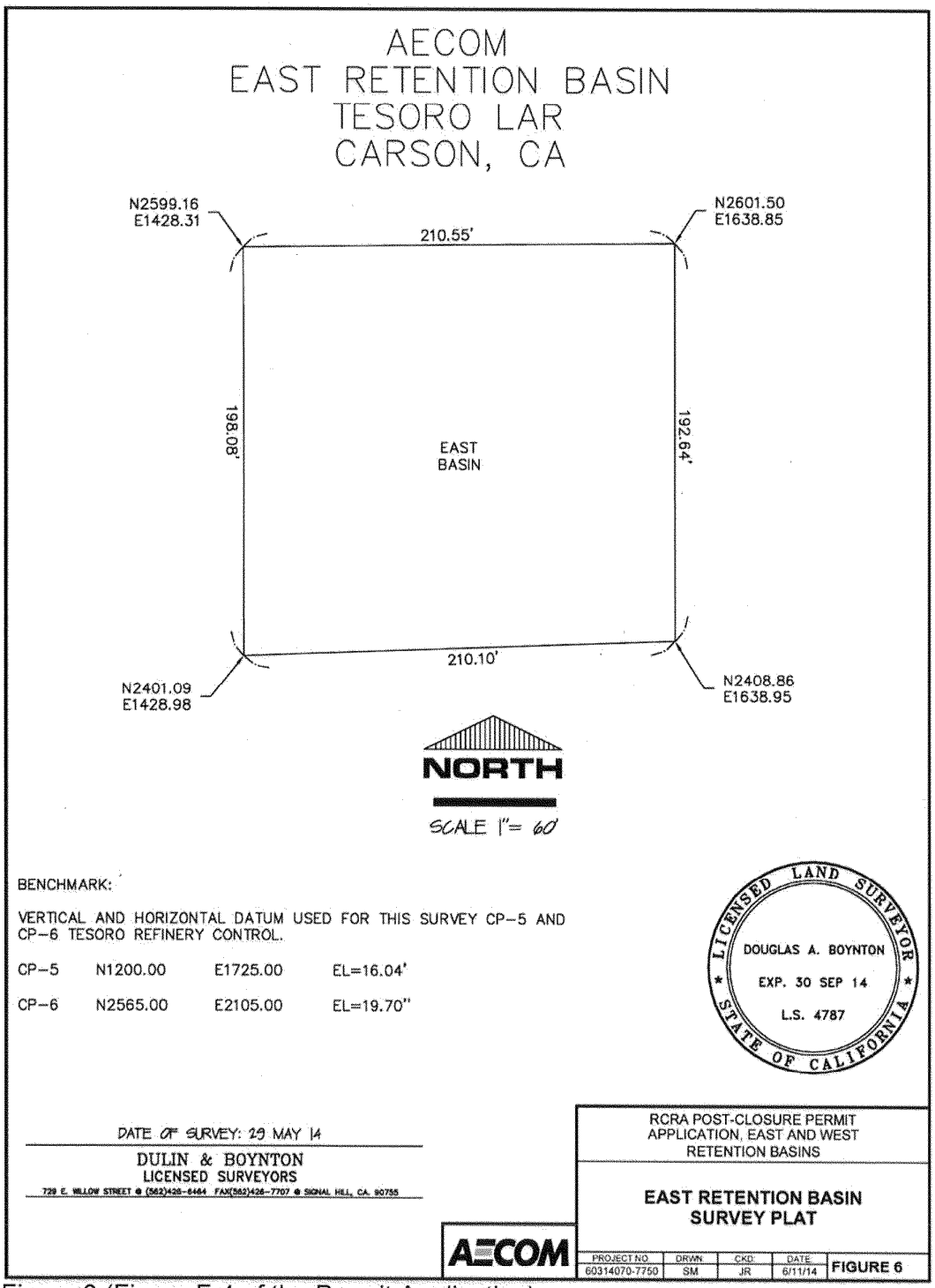



Figure 6 (Figure F-4 of the Permit Application)

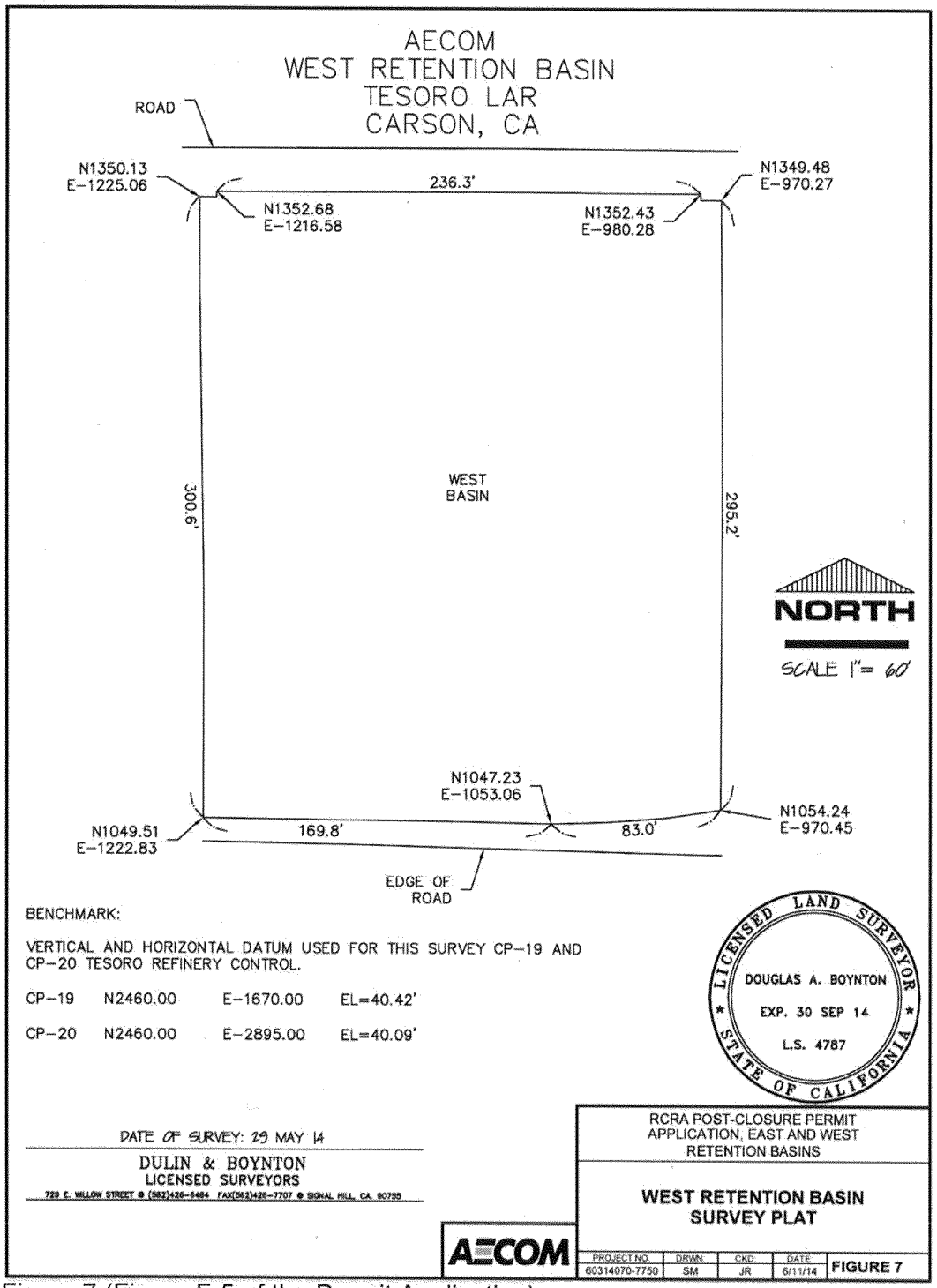



Figure 7 (Figure F-5 of the Permit Application)

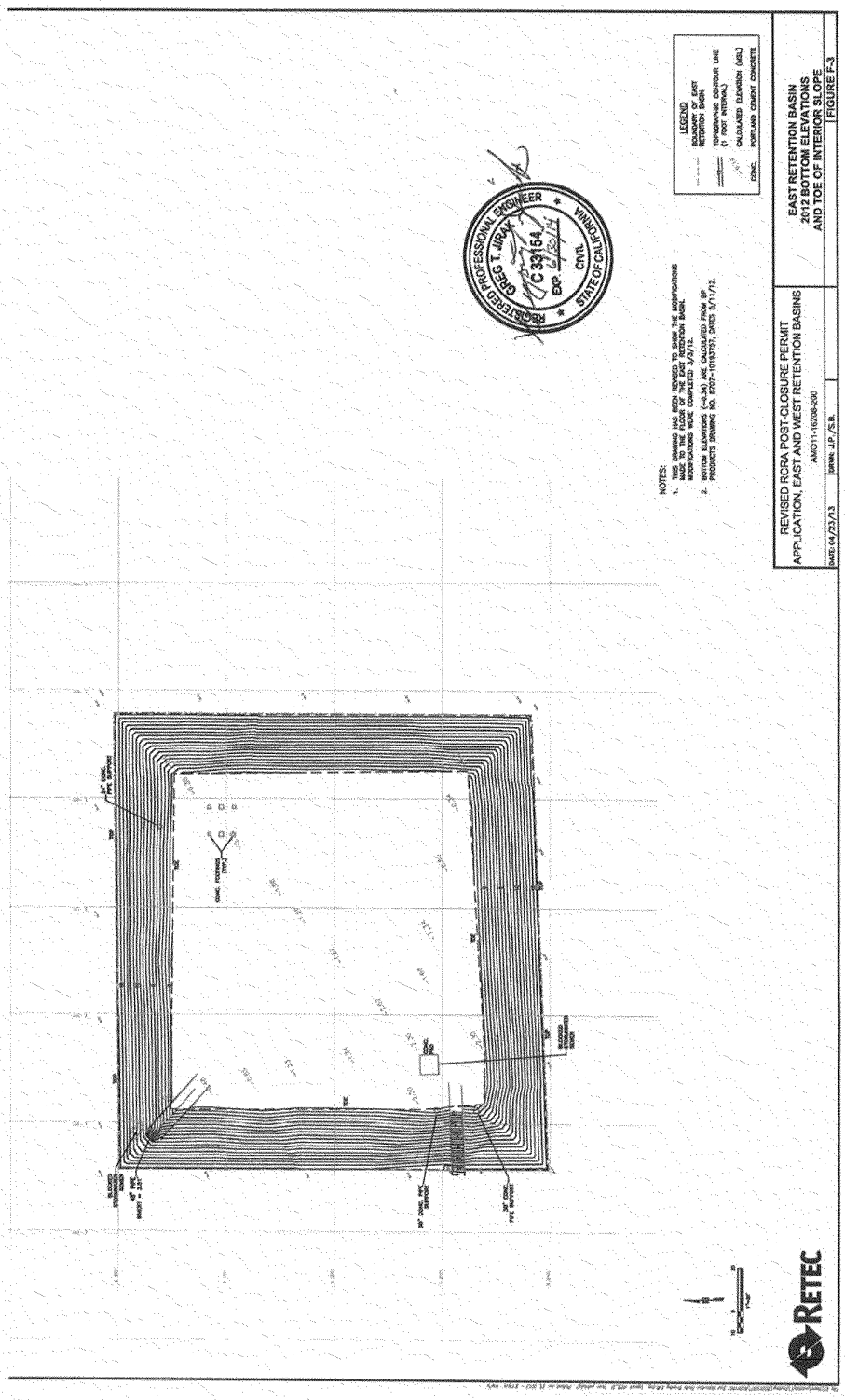



Figure 8 (Figure F-3 of the Permit Application)

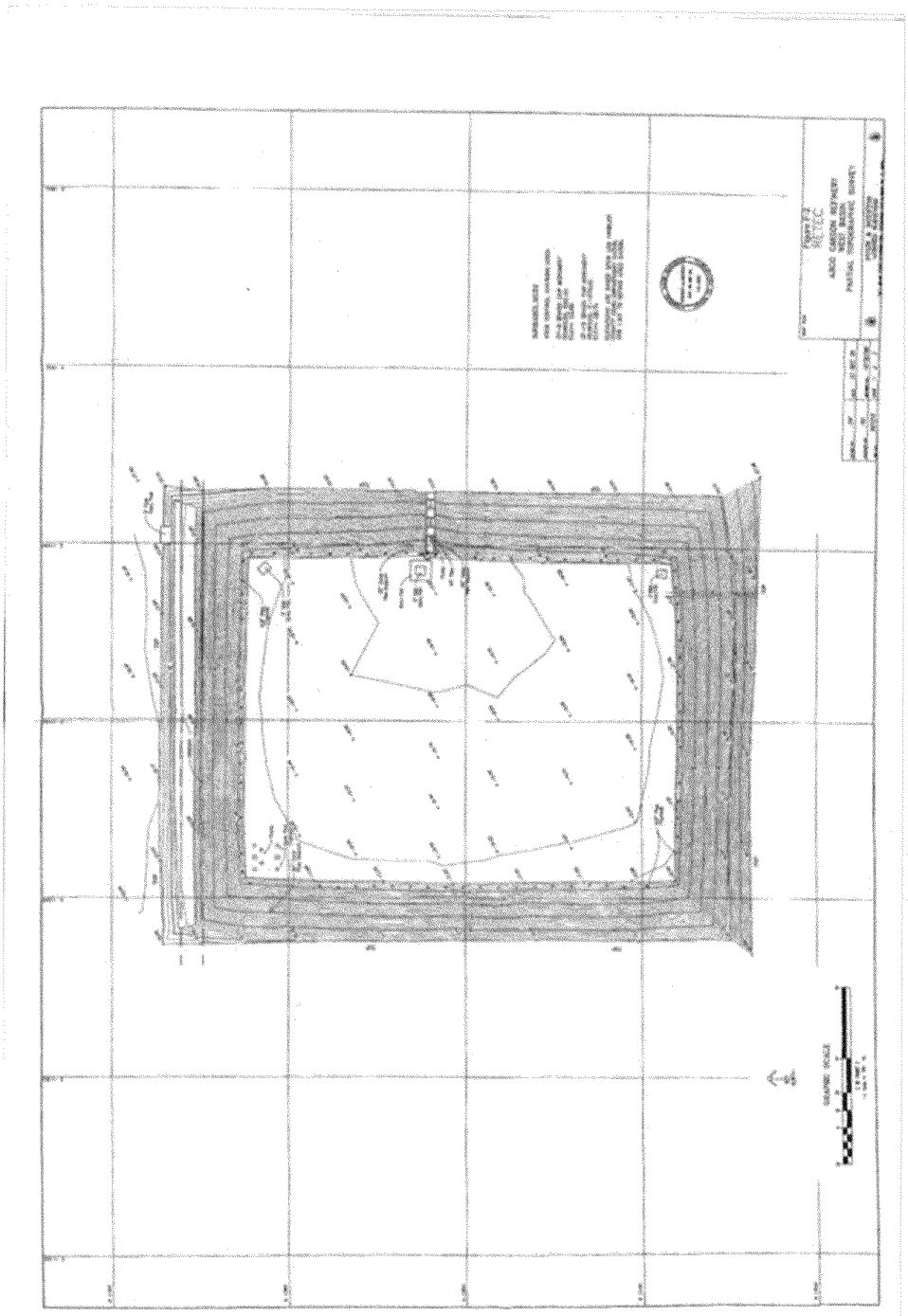


Figure 9 (Figure F-2 of the Permit Application)

**To:** jchin@chevron.com[jchin@chevron.com]; jamesvoyles@chevron.com[jamesvoyles@chevron.com]; brogers@chevron.com[brogers@chevron.com]; Friedman, Alan@Waterboards[Alan.Friedman@waterboards.ca.gov]; Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]; Nazemi, Mohsen@DTSC[Mohsen.Nazemi@dtsc.ca.gov]; Sullivan, Robert@DTSC[Robert.Sullivan@dtsc.ca.gov]; Cross, Jay@DTSC[Jay.Cross@dtsc.ca.gov]; Kowbel, Nelline@DTSC[Nelline.Kowbel@dtsc.ca.gov]; Edward.Nieto_dtsc.ca.gov[Edward.Nieto@dtsc.ca.gov]
**Cc:** Tai, Lung-yin@DTSC[Lung-yin.Tai@dtsc.ca.gov]
**From:** Ruffin, Paul@DTSC
**Sent:** Fri 8/18/2017 1:25:01 AM
**Subject:** Chevron Richmond Refinery Landfarms Post-Closure Permit - Administrative Record

Today, DTSC Permit Appeals received the administrative record for the Chevron Richmond Refinery Landfarms Post-Closure Permit decision.

Paul Ruffin

Hazardous Substances Engineer

Brownfields and Environmental Restoration Program

Department of Toxic Substances Control

8800 Cal Center Drive

Sacramento, California 95826-3200

(916) 255-6677

appeals@dtsc.ca.gov

**To:** Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]
**Cc:** Rizgar.Ghazi_dtsc.ca.gov[Rizgar.Ghazi@dtsc.ca.gov]; Lavinger, Steve@DTSC[Steve.Lavinger@dtsc.ca.gov]; Zhang, Yun@DTSC[Yun.Zhang@dtsc.ca.gov]; Schievelbein, Kathie@DTSC[Kathie.Schievelbein@dtsc.ca.gov]; Kou, Roberto@DTSC[Roberto.Kou@dtsc.ca.gov]; Ramirez, Larry@DTSC[Larry.Ramirez@dtsc.ca.gov]; Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Thur 8/6/2015 7:42:55 PM
**Subject:** FW: Tesoro Refining and Marketing Company LLC Community Update August 2015
Tesoro Refining and Marketing Company LLC Community Update August 2015.pdf
FINAL Draft Post Closure Permit Tesoro Carson Refinery August 12- 2015.pdf
Tesoro Carson Post Closure Permit Letter August 2015.pdf
Tesoro Carson Refinery NOE_final.pdf
Tesoro Carson Refinery Statement of Basis.pdf
Tesoro Carson Draft Fact Sheet August 2015 Text Only.pdf
Carson Library Letter August 2015.pdf
Wilmington Public Library Letter.pdf

Hi Phil,

Since the Tesoro Carson Refinery Community Update for the draft Post Closure Permit has been sent out, I am sending the attached Draft Post Closure Permit Package to the Facility and the cc list and the libraries. The comment period starts on August 12 and ends on September 30, 2015. See attached. Thanks.

**From:** Spottsville, Christie@DTSC
**Sent:** Thursday, August 06, 2015 10:48 AM
**Cc:** Spottsville, Christie@DTSC; Maurer, Mary@DTSC; Eshaghian, Mike@DTSC
**Subject:** Tesoro Refining and Marketing Company LLC Community Update August 2015

The Department of Toxic Substances Control (DTSC) has sent you this email notification because you are either listed on the DTSC mandatory state and county email list, or you are recognized as a stakeholder for this project. Attached is a Community Update for a public comment period and meeting for Tesoro Refining & Marketing Company LLC located at 1801 E. Sepulveda Blvd., Carson, CA.

For more information about this project, visit this Envirostor link: http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD077227049. If you have any questions or require further information, contact Project Manager Mike Eshaghian at (818) 717-6679 or mike.eshaghian@dtsc.ca.gov.

Thank you,

Christie S. Spottsville

OT (T)

Office of Communications

Public Participation Unit

(714) 484-5311

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

August 6, 2015

Library Manager
Carson Regional Public Library
151 E. Carson Street
Carson, California 90745

INFORMATION REPOSITORY FOR DRAFT POST CLOSURE PERMIT RENEWAL, EAST AND WEST RETENTION BASINS, TESORO REFINING & MARKETING COMPANY, CARSON REFINERY, 1801 E. SEPULVEDA BOULEVARD, CARSON, CALIFORNIA, EPA ID NUMBER CAD 077227049

Dear Mr. Nguyen:

The Department of Toxic Substances Control (DTSC) has completed the technical review of the Post Closure Permit Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions dated June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) for the Tesoro Refining & Marketing Company LLC, Carson Refinery located at 1801 East Sepulveda Boulevard in Carson, California. DTSC has prepared the draft Post Closure Permit and Administrative Record for public review. Enclosed please find a complete package of all the documents which have been prepared for public review. Please make these documents available as part of the information repository for the facility.

The public comment period for the draft Post Closure Permit starts August 12, 2015 and ends on September 30, 2015. A Public Meeting will be conducted on August 27, 2015 at 6:00 p.m. at the Carson Community Center, North Entrance, Room 111, 801 E. Carson Street, Carson, CA 90745. DTSC will be proposing to approve the draft Post Closure Permit.

Thank you for your cooperation. If you have any questions regarding this letter, please contact the undersigned at (818) 717-6679.

Sincerely,

Mike Eshaghian

Mike Eshaghian
Project Manager
Permitting Branch

Enclosures

Printed on Recycled Paper

cc: Ms. Kateri Luka
Tesoro Refining & Marketing Company LLC
Los Angeles Refinery Carson Operations
Carson One Campus, MC 446G
2350 East 223rd Street.
Carson, California 90810

Ms. Sally Bilodeau, PG, CEG, CHG
AECOM
1220 Avenida Acaso
Camarillo, California 93012-8750

Mr. Phil Blum, P.E.,
Unit Supervisor
Permitting Branch
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Ms. Mary Sue Maurer
Public Participation
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

# California Environmental Protection Agency
# Department of Toxic Substances Control
# DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

**Facility Name:**
Tesoro Refining & Marketing
Company LLC, Carson Refinery
1801 E. Sepulveda Blvd.
Carson, California 90810

Facility EPA ID Number:
CAD077227049

Effective Date:

Expiration Date:

**Facility Owner Name:**
Tesoro Refining & Marketing Company LLC
2350 E. 223rd Street
Carson, California 90810

**Operator Name:**
Tesoro Refining & Marketing Company LLC
Carson Refinery
2350 E. 223rd Street
Carson, California 90810

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Post Closure Facility Permit is hereby issued to: Tesoro Refining & Marketing Company LLC, Carson Refinery.

The issuance of this Permit is subject to the terms and conditions set forth in the Approved Post Closure Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions dated June 17, 2014, July 7, 2014 and December 9, 2014. The Permit consists of 27 pages.

_____
Phil Blum, P.E.
Office of Permitting
Department of Toxic Substances Control

Date: _____

**TESORO REFINING & MARKETING COMPANY LLC**
**CARSON REFINERY**
**1801 E. SEPULVEDA BLVD.**
**CARSON, CALIFORNIA 90810**
**DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT**
**EAST AND WEST RETENTION BASINS**
**EPA ID NUMBER CAD 077227049**

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. **Owner of Facility**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

2. **Owner of Real Property**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

3. **Operator of Facility**

Tesoro Refining & Marketing Company LLC, Carson Refinery
2350 E. 223rd Street
Carson, California 90810

4. **Location**

The Tesoro Refining & Marketing Company LLC, Carson Refinery (Facility) is located at 1801 East Sepulveda Boulevard in Carson, California. Also the Facility has been using the 2350 E. 223rd Street, Carson, California 90810 address since their administrative Offices are in the main Campus Building.

The Facility is within Township 4 South, Range 13 West; Section 21. The assessor's parcel number is: 7315-006-003. The Refinery and most of the surrounding area are zoned for heavy manufacturing. As shown on Figure 1, the Facility is bordered by Wilmington Avenue to the west, 223rd Street on the north, Dominguez Channel and Alameda Street on the east and Sepulveda Boulevard on the south. Surrounding land use is primarily heavy manufacturing except for two areas. South of Sepulveda Boulevard and west of Wilmington Avenue are single family residences. North of 223rd Street and along the 405 freeway there are commercial automotive businesses.

The Facility is located in five separate geographic areas: the Main Refinery, the North Property, the Northeast Property, the Southeast Property, and the Southwest Property, which was formerly called the Southwest Tank Farm (Figure 2). Three roads—Sepulveda Boulevard, Wilmington Avenue, and Alameda Street—and the Dominguez Channel bound the majority of the Refinery. Most refining operations are conducted within the Main Refinery and the North Property. The Northeast Property

is located north and east of the Dominguez Channel; the Southeast Property is located east of Alameda Street; and the Southwest Property is located south of Sepulveda Boulevard. The current total area of the five geographical areas is approximately 702 acres (Figure 2).

The North Property consists of refining facilities, a warehouse, and shops. The Main Refinery consists of refining facilities, a cogeneration plant, and the majority of the Refinery's product shipping facilities and product storage area, referred to as the Main Tank Farm. The Northeast Property includes the Northeast Tank Farm, contractor parking and staging, and an employee athletic field. There is also a polypropylene unit in this area which is owned by a separate party. The northern half of the Southeast Property is used for coke storage. Most of the southern half of the Southeast Property is used for parking and vehicle storage. The Carson Product Terminal is located off site to the east (Figure 2).

The Southwest Property occupies an area of about 90 acres. Previous property owners used the Southwest Property for the bulk storage of liquid hydrocarbons in concrete-lined reservoirs. These former reservoirs were last used in 1970. The eastern half of the Southwest Property has been paved and is currently being leased for shipping container storage. The Carson Crude Terminal is located off site to the south (Figure 2).

The East and West Retention Basins, for which this RCRA Post-closure Permit Application (Application) was prepared, are located within the Main Refinery (shown in Figures 1, 2, 3 and 4).

## 5. Description of Facility Operations

The Facility is situated in a predominantly industrial area and is surrounded by a variety of manufacturing and petroleum-refining and storage facilities. The Facility currently has the capacity to process approximately 260,000 barrels of crude oil per day to make gasoline, jet fuel, diesel, liquefied petroleum gas (LPG), sulfur, and petroleum coke. A cogeneration plant, located on site, produces power to supply the Refinery and to export to utilities.

The Facility operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

## 6. Facility History

Petroleum refining operations have been conducted at the site since 1923 when the Pan American Petroleum Company began operations. In 1937, Richfield Oil Corporation purchased the property and expanded the refining operations. Additional parcels of land, purchased from 1937 through 1945, were added to the Refinery. The Atlantic Refining Company and the Richfield Oil Corporation merged in 1966. In 2000, BP America Inc. acquired Atlantic Richfield Company. As a result, the name of the Refinery was changed to the BP West Coast Products, Carson Refinery in 2002. In June 2013, the BP West Coast Products, Carson Refinery was sold to Tesoro Refining & Marketing Company LLC (Tesoro).

The East and West Retention Basins became regulated under RCRA on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Facility historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter. The Retention Basins were granted interim status on September 25, 1990.The Facility initiated closure procedures for the Retention Basins with submittal of a closure plan in 1993. A revised closure plan was submitted in 1994. In 1995, the Interim Status Closure and Post-Closure Plan, Revision 2 was submitted.

On December 4, 1997, DTSC approved the closure certification of the East and West Retention Basins. The Facility submitted a Post-Closure Permit Application for the Retention Basins on May 21, 1998 and a subsequent revision in December 2002. DTSC issued the “Final Hazardous Waste Facility Post-Closure Permit” for the Retention Basins on December 24, 2003 with the effective date of January 26, 2004. BP West Coast Products submitted a Post Closure Permit Renewal Application on September 27, 2012.

A Class 1* Post Closure Permit Modification was issued on August 5, 2013 for the change of ownership to Tesoro Refining & Marketing Company. On November 25, 2013, Tesoro submitted a Revised Post Closure Permit Application dated September 2013 due to the change of ownership. Subsequent revisions to the Application were submitted on June 17, 2014, July 7, 2014 and December 9, 2014 in response to DTSC comments.

## 7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility shall be deemed to have started from the effective date of this Post Closure Permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

## PART III. GENERAL CONDITIONS

1. PERMIT APPLICATION DOCUMENTS

The revised Part "A" Application dated November 7, 2013 and the DTSC-approved revised Post Closure Permit Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions submitted on June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) are hereby made a part of this Permit by reference.

2. EFFECT OF PERMIT

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility.

(b) The Permittee is permitted to operate, monitor and maintain this Facility post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes in the East and West Retention Basins not specifically authorized in this Permit or otherwise authorized by DTSC is strictly prohibited.

(c) Compliance with the terms and conditions of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., tit. 22, §66270.43).

(g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards (RWQCB) and any conditions imposed pursuant to section 13227 of the Water Code.

3. COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in California Code of Regulations, title 14, section 15070 et seq.

4. ENVIRONMENTAL MONITORING

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6.

(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility are those described in Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application.

(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1 of the Approved Application.

(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility are described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.1; of the Approved Application. During future sampling events, if the Facility finds constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Facility shall add them to the list of COCs.

(d) For the purpose of California Code of Regulations, title 22, section 66264.94, the Concentration Limits for the Facility are described in Appendix 6, RCRA

Basins Groundwater Monitoring Plan, section 2.1.1 of the Approved Application.

(e) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 4.1 of the Approved Application.

(f) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility are described in Appendix 3a, RCRA Retention Basins Post Closure Plan, section 2.2 of the Approved Application; and Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.2 of the Approved Application.

(g) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.3 of the Approved Application and shall be 30 years beginning with the date of the issuance of this post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

(h) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility is described in Appendix 6, RCRA Retention Basins Groundwater Monitoring Plan, section 4.0 of the Approved Application. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application.

(i) The Facility shall comply with the requirements of the Los Angeles Regional Water Quality Control Board (LARWQCB ) issued Cleanup and Abatement Order (CAO) No. 90-121 to Atlantic Richfield Company and any subsequent Order. Requirements of the CAO included identification of sources, delineation of plumes, recovery of light non-aqueous phase liquid (LNAPL) throughout the site, and initiation of dissolved-plume cleanup.

5. ANNUAL HAZARDOUS WASTE REDUCTION AND MINIMIZATION CERTIFICATION

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).

6. ACCESS

(a) DTSC, its contractors, employees, agents, and/or any United States Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance of the unit and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit, other than those specified in this Part IV, unless otherwise authorized by DTSC. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of California Code of Regulations, title 22, section 66270.1(c) and other similar, unit-specific regulatory requirements, this Facility has two Post Closure Hazardous Waste Management Units for the purpose of this Permit. The two Post Closure units are East and West Retention Basins. The Refinery operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Refinery's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District. The Retention Basins became regulated under the RCRA on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Refinery historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter. The East and West Retention Basins are the regulated units that are under post-closure care. These units are described in detail in the Approved Application and are as follows:

UNIT NAME:

The East Retention Basin

LOCATION:

The East Retention Basin is located within the Main Refinery (shown in Figures 1, 2, 3, 4, 5, 6 and 8). The East Retention Basin site was the location of a lube oil plant and boiler house. The East Retention Basin was constructed in 1969 and closed in 1997.

ACTIVITY TYPE:

Groundwater monitoring; operation and maintenance activities; site inspection.

ACTIVITY DESCRIPTION:

The activities include groundwater monitoring, site inspections, repair and maintenance of the monitoring wells and the East ~~and West~~ Retention Basin~~s~~ as described in Appendix 6 of the Approved Application. Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with the Retention Basin include the Basin walls, liners, and pumps.

The Facility has an extensive groundwater monitoring network and past and planned remediation activities. From 2013, the post closure groundwater monitoring program has been expanded to seven (7) wells to be gauged and four (4) wells to be sampled as indicated in the following table:

East Retention Basin Wells
AMR/601-D (gauging)
AMR/602-D (gauging)
AMR/603-D (gauging)
AMR/604-D (monitoring –Point of Compliance (POC))
AMR/605-D (monitoring -POC)
AMR/611-D (monitoring -POC)
AMR/613-D (monitoring -POC)

Locations of the groundwater monitoring wells are shown in Figures 4 and 5. Groundwater samples are collected semiannually, in or near April and October of each year, from the following wells at the East Retention Basin:

East Retention Basin: AMR/604-D, AMR/605-D, AMR/611-D, and AMR/613-D

If LNAPL is detected when gauging any of these wells, no sample is collected from that well. Groundwater samples collected from the East Retention Basin~~s~~ monitoring wells are analyzed using current US EPA Methods for the following routine constituents: Volatile organic compounds (VOCs) (including benzene, ethyl benzene, toluene, and xylene, fuel oxygenates, and ethanol) ; and total petroleum hydrocarbons (TPHs) .
In addition to the above routine constituents, groundwater samples collected from the Retention Basin wells will be analyzed for Appendix IX constituents every 5 years.

PHYSICAL DESCRIPTION:

The East Retention Basin~~s~~ was constructed in 1969 with 4 inches of gunite sprayed over 4-inch by 4-inch steel mesh. The concrete walls and floors of the Retention Basin~~s~~ were then coated with primer coat and an impervious, chemically resistant, epoxy topcoat. In 2012, a portion of the floor of the East Retention Basin was filled in with crushed miscellaneous base covered with 6 inches of steel-reinforced concrete. The East Retention Basin was

filled to an average depth of 5 feet. The concrete was sealed consistent with the original Retention Basin design with a primer coat and an impervious, chemically resistant, epoxy topcoat. The East Retention Basin is 200 feet by 210 feet with an average depth of 19 feet. See Figures 6 and 8.

MAXIMUM CAPACITY:

The East Retention Basin has a useable volume of 4,320,000 gallons, which allows for 1 foot of freeboard.

WASTE SOURCES:

The Facility historically used the Retention Basins for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basins stemmed from the determination that the waste, at times, exceeded TCLP criterion for benzene (D018) of 0.5 milligrams per liter.

WASTE TYPES:

The Facility operates the East Retention Basin~~s~~ as a surface impoundment for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basin is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

RCRA WASTE CODES:

Benzene: D018

UNIT NAME:

West Retention Basin

LOCATION:

The West Retention Basin~~s~~ is located within the Main Refinery (shown in Figures 1, 2, 3, 4, 5, 7 and 9). The West Retention Basin site was historically used to manage wastewater and slop oil. The West Retention Basin was constructed in 1969 and closed in 1997.

ACTIVITY TYPE:

Groundwater monitoring; operation and maintenance activities; site inspection.

ACTIVITY DESCRIPTION:

The activities include groundwater monitoring, site inspections, repair and maintenance of the monitoring wells and the West Retention Basin as described in Appendix 6 of the Approved Application. Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with the Retention Basin include the Basin walls, liners, and pumps.

The Facility has an extensive groundwater monitoring network and past and planned remediation activities. From 2013, the post closure groundwater monitoring program has been expanded to six (6) wells to be gauged and three (3) wells to be sampled as indicated in the following table:

West Retention Basin Wells

AMR/606-D (gauging)
AMR/607-D (monitoring -POC
AMR/608-D (monitoring -POC)
AMR/609-D (gauging)
AMR/610-S (gauging)
AMR/612-D (monitoring upgradient)

Locations of the groundwater monitoring wells are shown in Figure 4 and 5. Groundwater samples are collected semiannually, in or near April and October of each year, from the following wells at the West Retention Basin:

West Retention Basin: AMR/607-D, AMR/608-D, and AMR/612-D

If LNAPL is detected when gauging any of these wells, no sample is collected from that well. Groundwater samples collected from the West Retention Basin monitoring wells are analyzed using current US EPA Methods for the following routine constituents: Volatile organic compounds (VOCs) (including benzene, ethyl benzene, toluene, and xylene, fuel oxygenates, and ethanol) ; and total petroleum hydrocarbons (TPHs) .
In addition to the above routine constituents, groundwater samples collected from the Retention Basin wells will be analyzed for Appendix IX constituents every 5 years.

PHYSICAL DESCRIPTION:

The West Retention Basin was constructed in 1969 with 4 inches of gunite sprayed over 4-inch by 4-inch steel mesh. The concrete walls and floors of the Retention Basins were then coated with primer coat and an impervious, chemically resistant, epoxy topcoat. The West

Retention Basin is 269 feet by 300 feet with an average depth of 22 feet. See Figures 7 and 9.

MAXIMUM CAPACITY:

The West Retention Basin has a useable volume of 10,230,000 gallons, which allows for 1 foot of freeboard.

WASTE SOURCES:

The Facility historically used the Retention Basin for emergency management of stormwater commingled with process water during large rainfall events. Regulation of wastes handled in the Retention Basin stemmed from the determination that the waste, at times, exceeded the Toxicity Characteristic Leaching Procedure (TCLP) criterion for benzene (D018) of 0.5 milligrams per liter.

WASTE TYPES:

The Facility operates the West Retention Basin as a surface impoundment for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

RCRA WASTE CODES:

Benzene: D018

## PART V. SPECIAL CONDITIONS

(a) The Permittee shall comply with the requirements of the LARWQCB issued CAO No. 90-121 to Atlantic Richfield Company and any subsequent Order. The Permittee shall monitor the groundwater in accordance with the Order and any subsequent order and in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. The Permittee shall simultaneously provide to DTSC a copy of all the submittals required by the RWQCB.

(b) The Permittee shall comply with the Annual Report requirements specified in California Code of Regulations, title 22, chapter 14 and shall include the monitoring and response program data in its annual report. In addition, the Permittee shall submit a post closure semiannual groundwater monitoring report after each semiannual groundwater monitoring and sampling event to DTSC.

(c) Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with each Retention Basins include the Retention Basin walls, liners, and pumps

(d) The Permittee shall conduct annual groundwater monitoring and periodic site inspection, repair and maintenance activities during the post closure care period in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. Additional inspections will be performed after any earthquakes of sufficient magnitude or intensity to potentially cause damage to Retention Basin structures.

(e) The Permittee shall maintain the Retention Basins so that it is free of cracks, spalling, and gaps upon visual inspection of the liner. The Permittee shall immediately repair all cracks, spalling and gaps upon detection in the liner and/or the basal structure of the Retention Basins.

(f) When more than 3 feet of stormwater and/or non-hazardous wastewater have accumulated in a Retention Basin, the Permittee will collect a representative sample in laboratory supplied container (s) and analyze it for total benzene (D018) using USEPA Method 8260B. The results of the water analysis shall be included in a semiannual groundwater monitoring report submitted to DTSC. If a sample exceeds 0.5 mg/l of benzene, DTSC shall be notified by telephone or e-mail within 24 hours of receipt of the analytical results. Written notification accompanied by the certified analytical report will be provided within 7 days from the verbal or e-mail notification or seven days following receipt of the final laboratory report, whichever is later. The notification shall include but not be limited to the following:

1) Date of use;

2) Storage duration;

3) Volume of wastewater;

4) Analytical results of wastewater(If the sampling results shows benzene concentrations exceeding 0.5 mg/L, the report shall explain the reasons and sources of the higher benzene concentrations in the wastewater or storm water);

5) Air monitoring results if any;

6) Type of emergency which required the use of the Retention Basins.

(g) The Permittee shall not store any hazardous waste in the Retention Basins. The Permittee shall immediately test storm water in the Retention Basins following an emergency or use and commence immediate pumping of the storm, after sampling, back into the treatment systems when capacity is available. The Permittee shall follow the notification requirements specified in item (g). If the sludge is determined to be a hazardous waste, the Permittee shall send it offsite for treatment or disposal at an authorized hazardous waste treatment or disposal facility.

(h) The Permittee shall maintain a minimum of 1-foot of freeboard when the Retention Basins are in use.

(i) The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1. The Annual Groundwater Monitoring and Response Program Report may be submitted simultaneously to DTSC and RWQCB by each March 1.

(j) Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 360 days of the approval of this Permit, the Permittee shall have a DTSC-approved Land Use Covenant signed and recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement by check payable to the Department of Toxic Substances Control and shall be sent to: Accounting Unit, Department of Toxics Substances Control, P.O. Box 806, Sacramento, California 95812-0806. All checks shall reference the name and address of the Facility.

(k) The Permittee shall maintain the financial mechanism dated 3/23/2015 that was approved by DTSC for a total of $29,636,000 ($10,660,000 is for post closure as it is calculated in Appendix 5, Table 8, Post-Closure Cost Estimate Financial Assurance Documentation of the approved Application and the balance is maintained for corrective action) to demonstrate financial assurance for post closure and corrective action.

## PART VI. CORRECTIVE ACTION

A. SUMMARY OF THE CORRECTIVE ACTION AND GROUNDWATER REMEDIATION

The Facility performed early investigation and remediation activities as voluntary actions from the mid-1970s to mid-1980s. In 1985, Los Angeles area refineries were issued orders by the LARWQCB to investigate and initiate cleanups. Order No. 85-17, issued to Atlantic Richfield Company, required subsurface investigation and reporting. The Facility was already meeting most of the subsurface investigation requirements of the Order; however, in response to the Order, the Facility initiated a groundwater monitoring program and began submitting reports on a quarterly, and subsequently a semiannual, basis to the LARWQCB.

In 1990, the LARWQCB issued Cleanup and CAO No. 90-121 to Atlantic Richfield Company. Requirements of the CAO included identification of sources, delineation of plumes, recovery of LNAPL throughout the site, and initiation of dissolved-plume cleanup. Consistent with the CAO (and SB 1082), site-wide groundwater corrective action is conducted under the oversight of the LARWQCB.

The Facility, along with other members of the Carson Regional Groundwater Group (CRGG), embarked on a 4-year groundwater modeling program to develop a better understanding of groundwater flow. The U.S. Environmental Protection Agency (USEPA) and the LARWQCB have been involved in the oversight of these efforts. Fluid levels throughout the refinery are measured in wells to monitor changes in groundwater elevation and gradient, and to monitor for new occurrences of LNAPL. LNAPL is being monitored semiannually and recovered from on-site wells Potential sources of LNAPL continue to be investigated and characterized.

B. CORRECTIVE ACTION CONDITIONS

1. The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the LARWQCB pursuant to the Cleanup and CAO No. 90-121 and any other subsequent orders or requirements by the LARWQCB or US EPA.

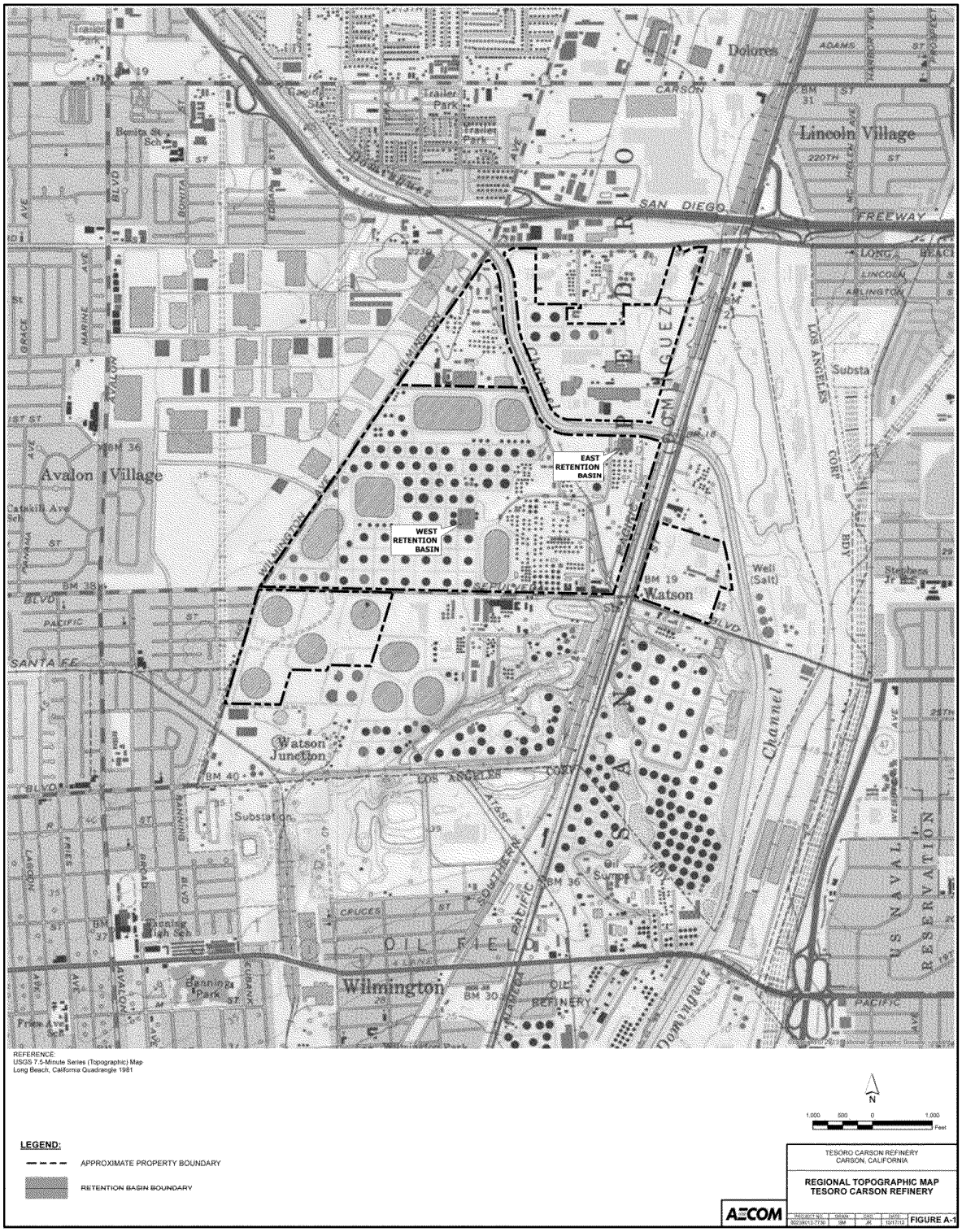
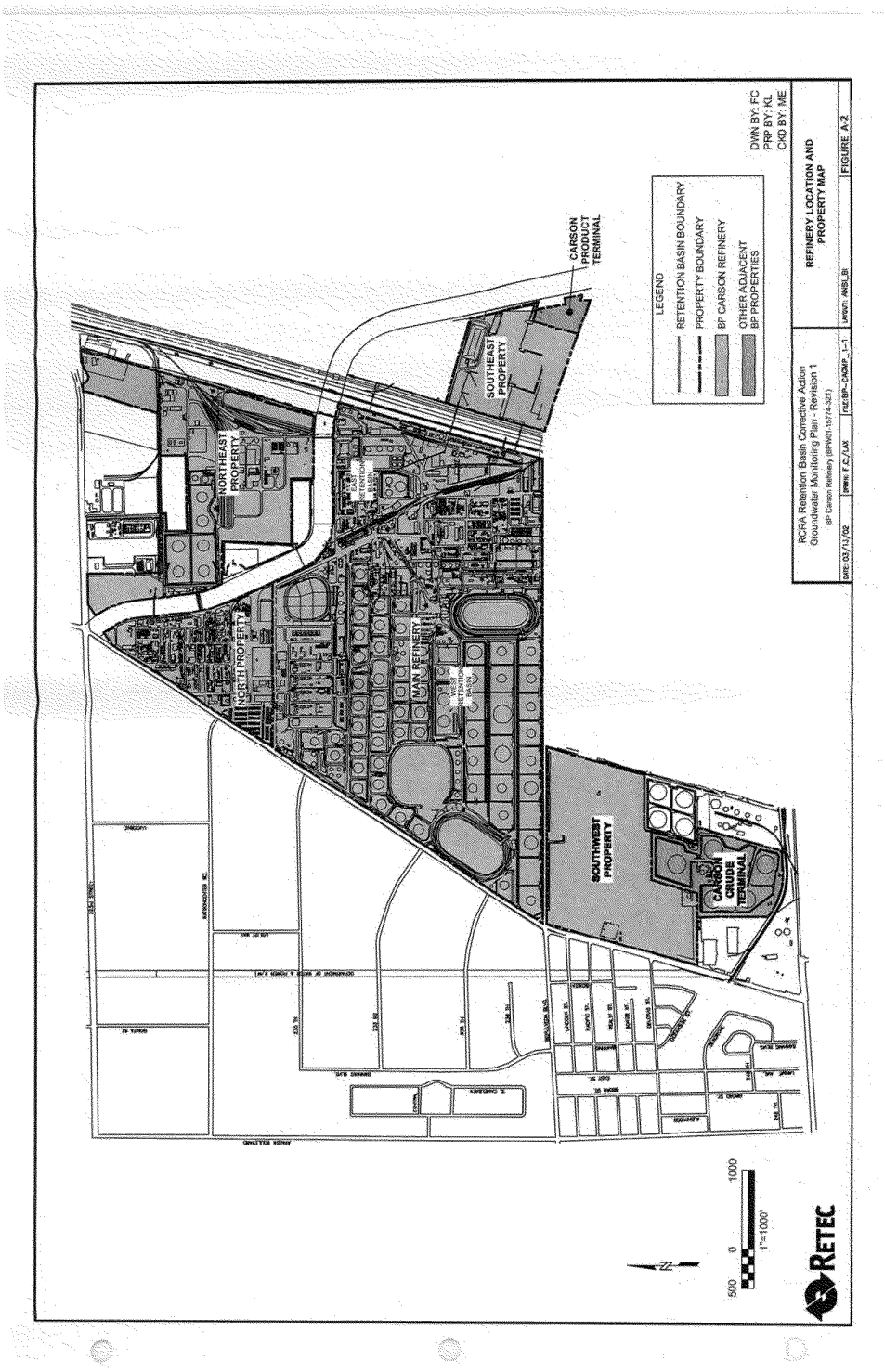



Figure 1 (Figure A-1 of the Permit Application)


LEGEND
RETENTION BASIN BOUNDARY
PROPERTY BOUNDARY
BP CARSON REFINERY
OTHER ADJACENT BP PROPERTIES
DWN BY: FC
PRP BY: KL
CKD BY: ME
REFINERY LOCATION AND PROPERTY MAP
FIGURE A-2
RCRA Retention Basin Corrective Action
Groundwater Monitoring Plan - Revision 1
BP Carson Refinery (BPW01-15/74-321)
DATE: 03/11/02
DRWN: F.C./LAK
FILE: BP-CACMP_1-1
LAYOUT: ANSI_B1
CARSON PRODUCT TERMINAL
SOUTHEAST PROPERTY
NORTHEAST PROPERTY
NORTH PROPERTY
MAIN REFINERY
SOUTHWEST PROPERTY
CARSON CRUDE TERMINAL
500
0
1000
1"=1000'
RETEC

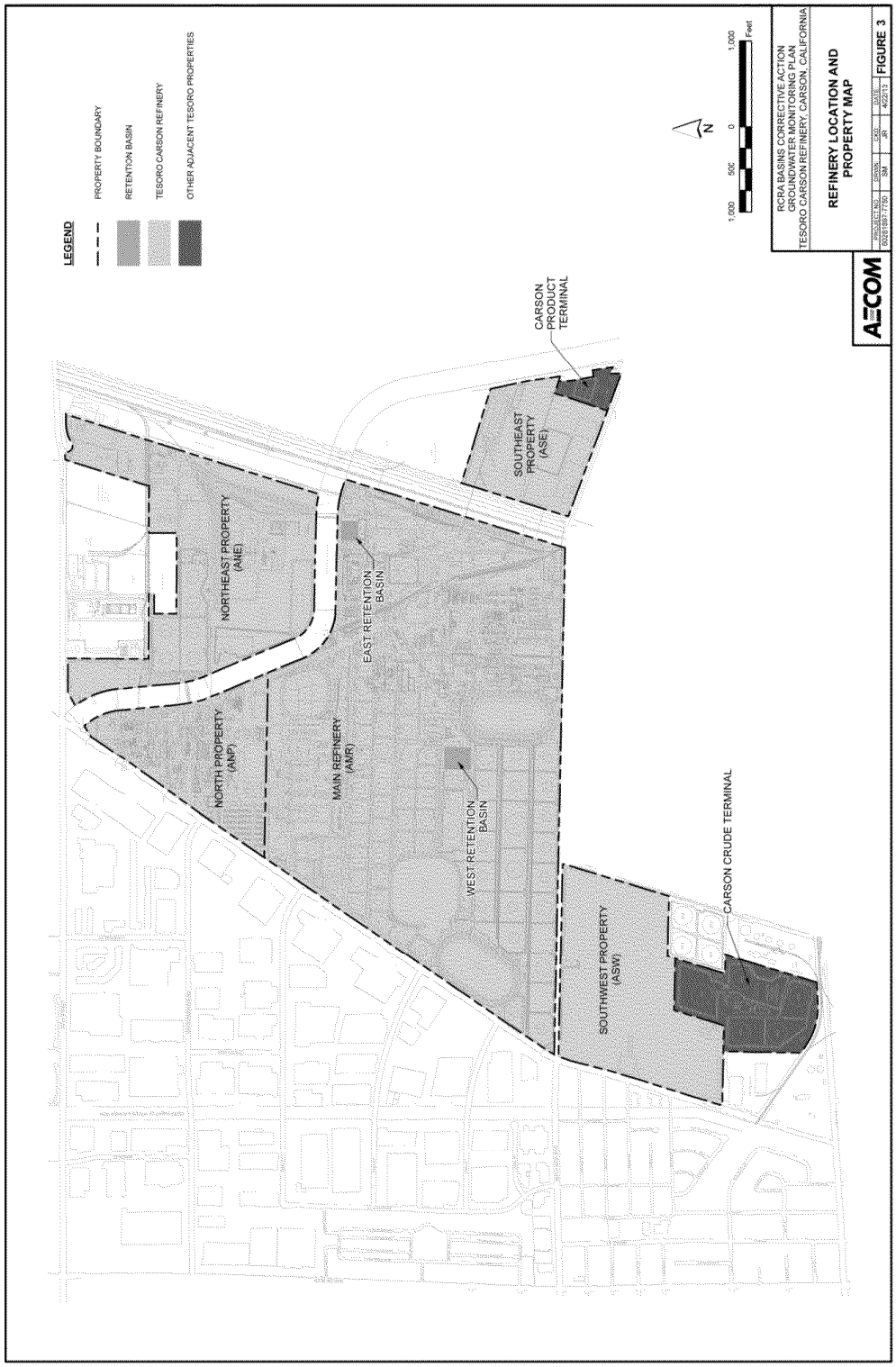



Figure 2 (Figure A-2 of the Permit Application)Figure 3 (Figure 1 of the Permit Application)

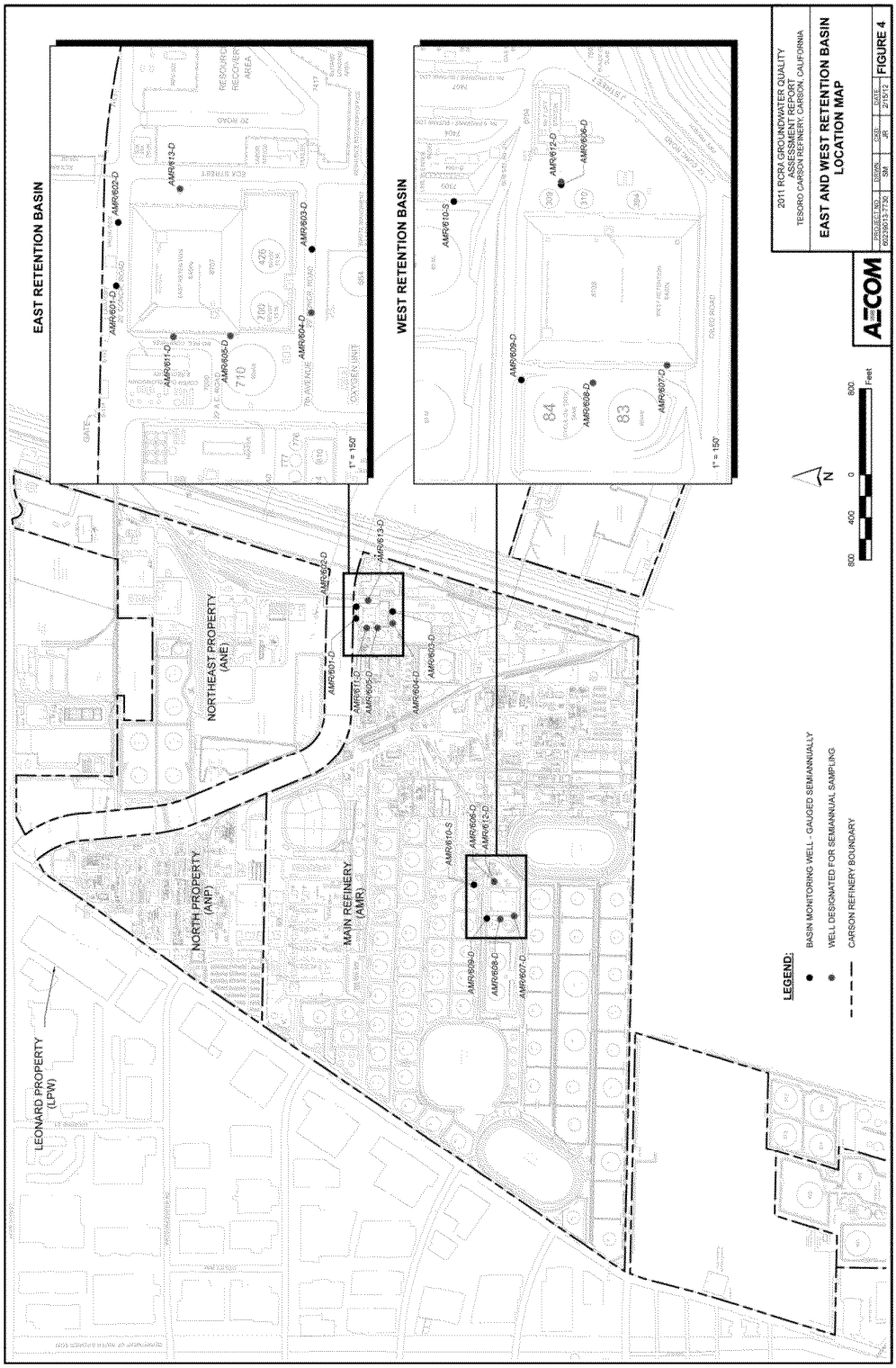



Figure 4 (Figure G-1 of the Permit Application)

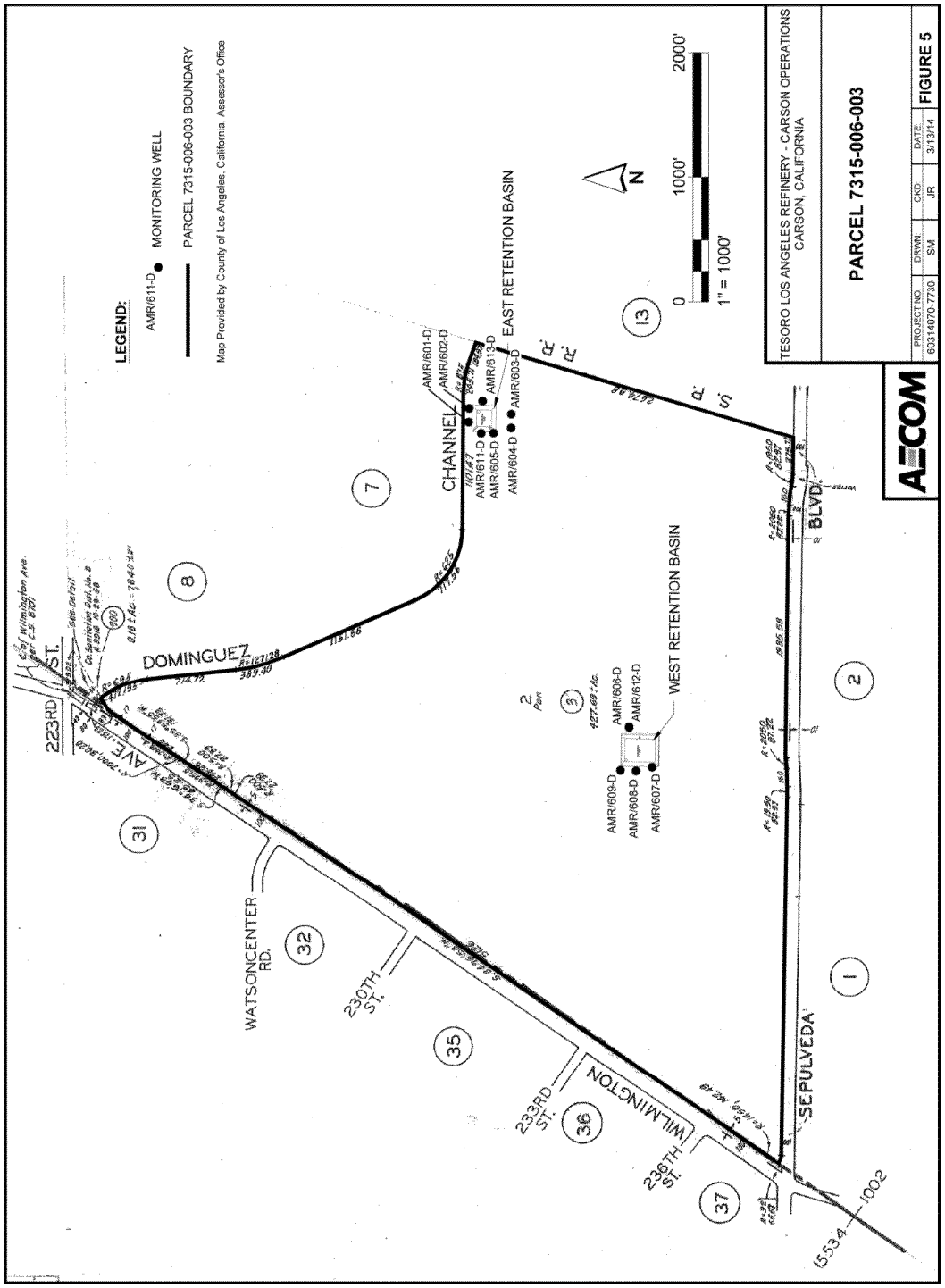



Figure 5 (Exhibit C of the Permit Application)

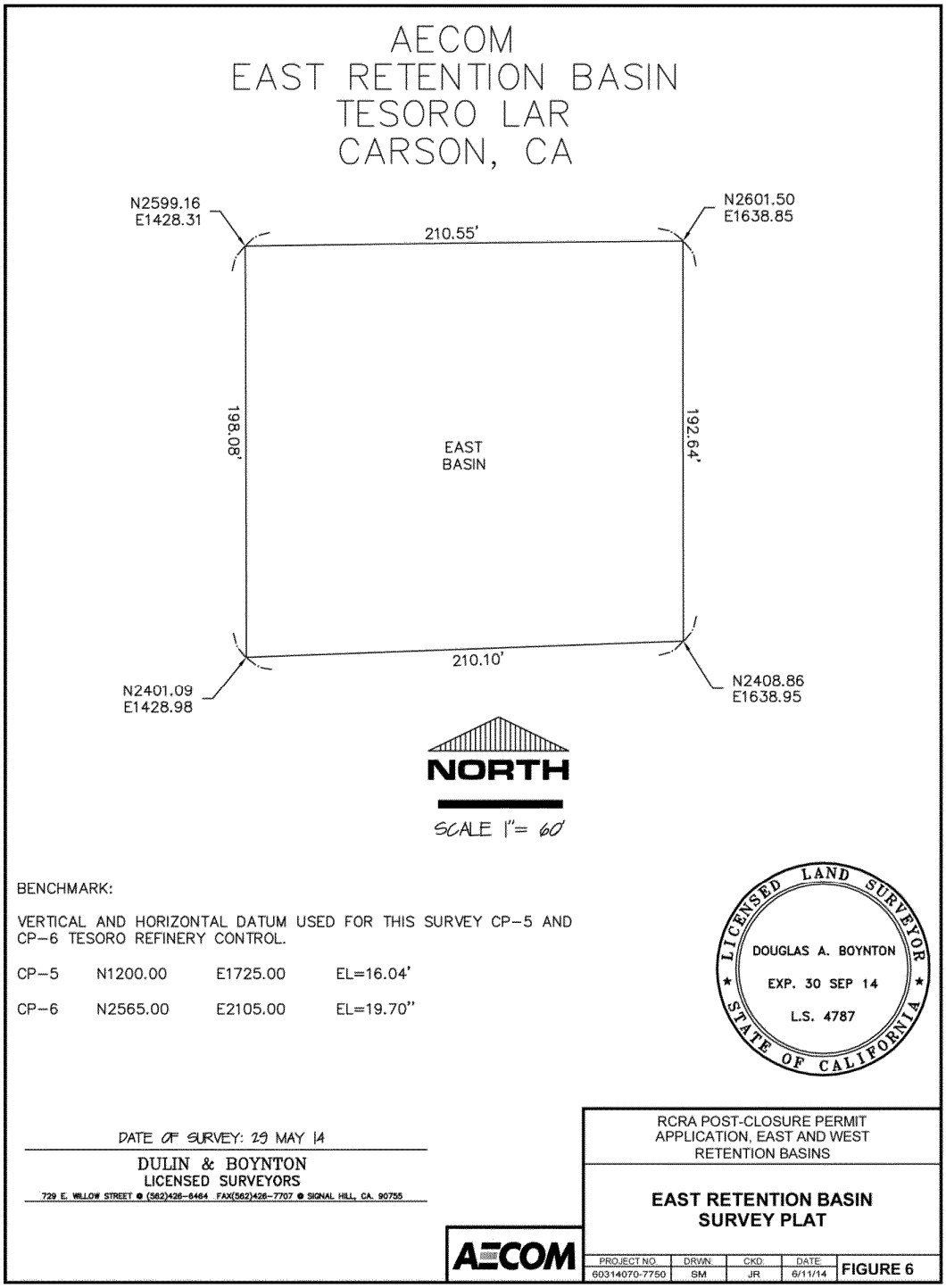



Figure 6 (Figure F-4 of the Permit Application)

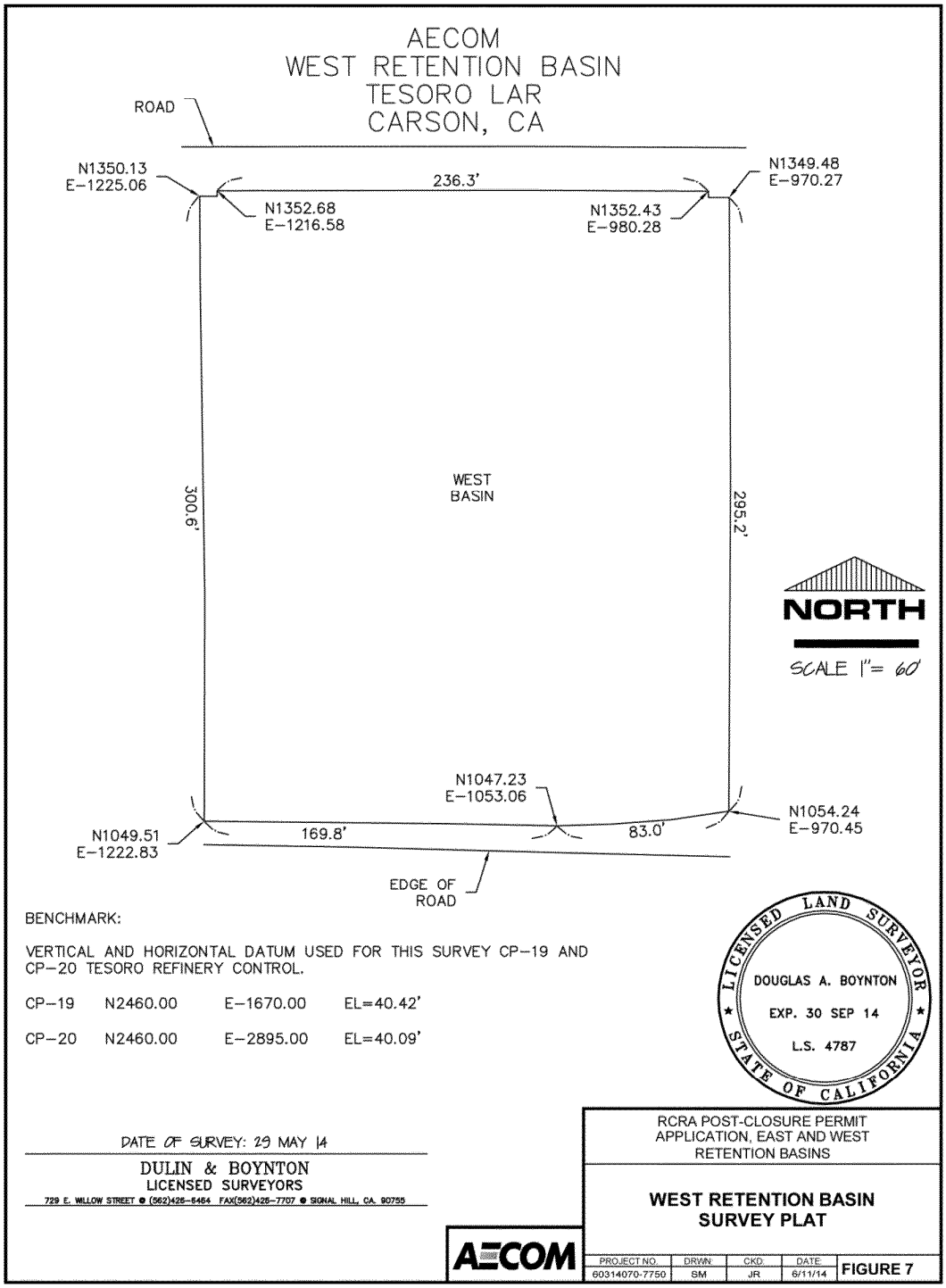



Figure 7 (Figure F-5 of the Permit Application)

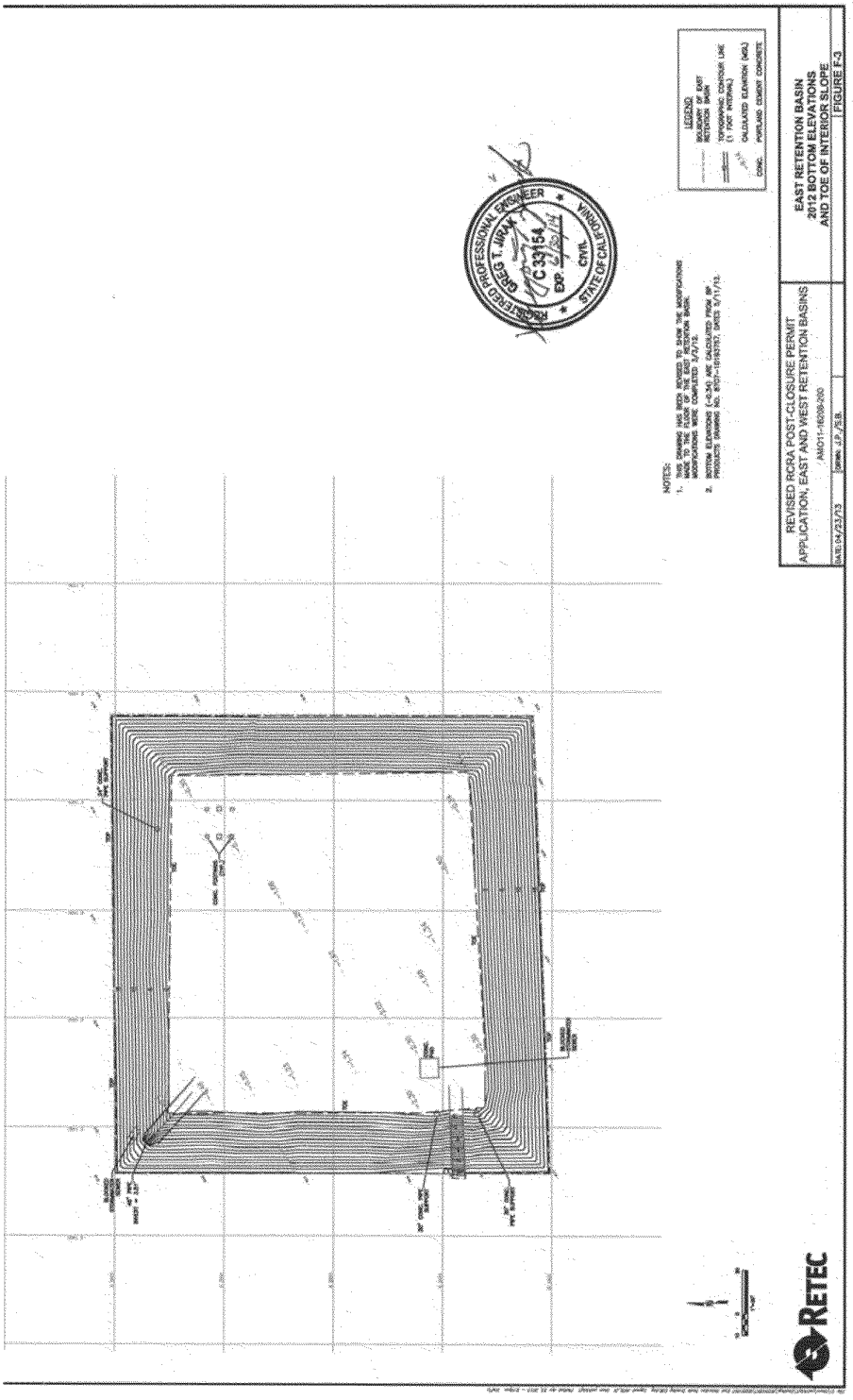



Figure 8 (Figure F-3 of the Permit Application)

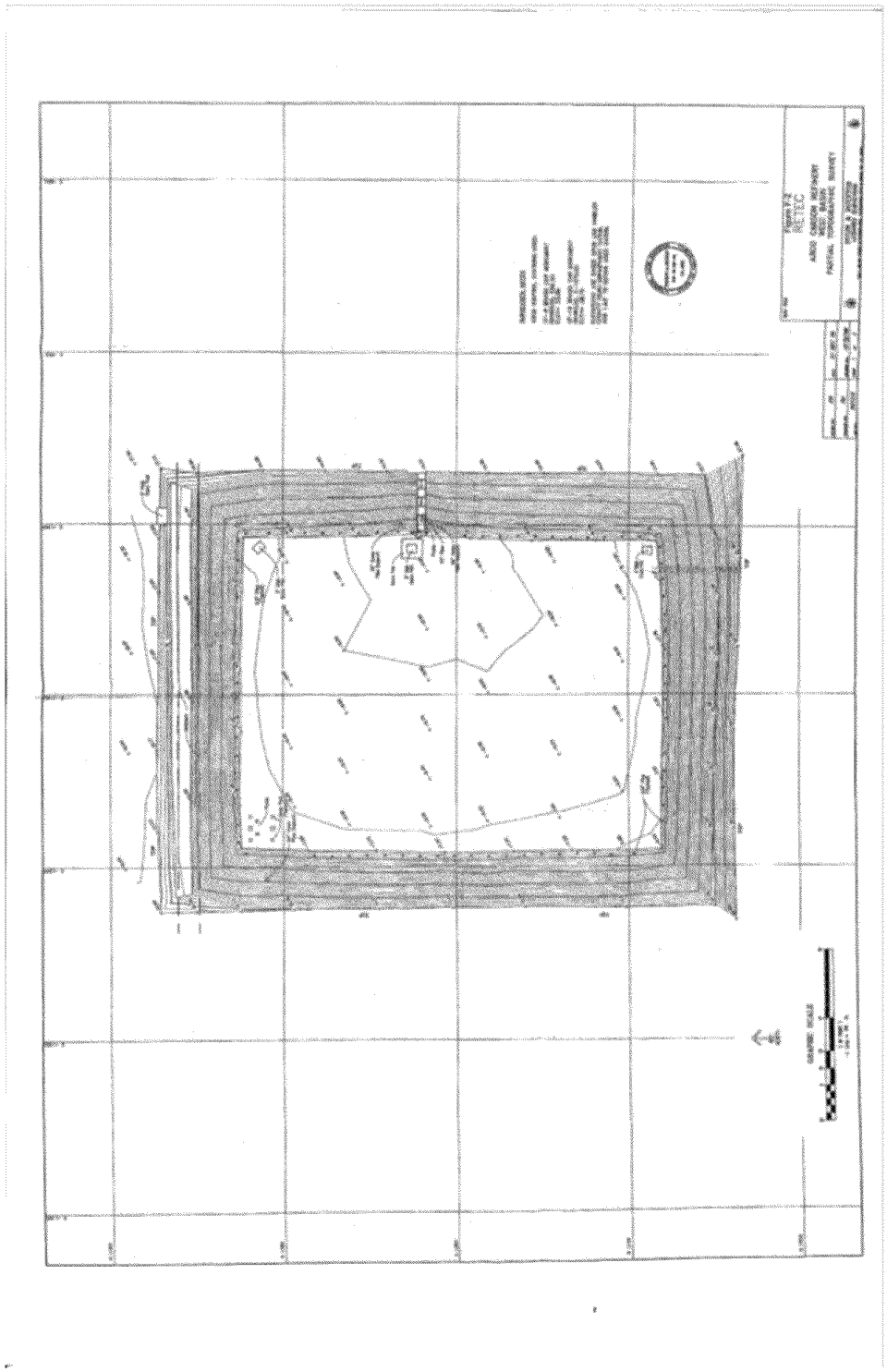


Figure 9 (Figure F-2 of the Permit Application)

Fact Sheet, August 2015

# Draft Post-Closure Permit Available for Public Review and Comment for Tesoro Refining & Marketing Company LLC, Carson Refinery in Carson

Anuncio
Si prefiere hablar con alguien en español acerca de ésta información, favor de llamar a Ricardo Gonzalez, Departamento de Control de Substancias Tóxicas. El número de teléfono es 818-717-6693
.

The Department of Toxic Substances Control (DTSC) would like to invite you to comment on the draft Post-Closure Permit (Permit) for the East and West Retention Basins at Tesoro Refining & Marketing Company LLC, Carson Refinery at 1801 East Sepulveda Boulevard in Carson, California. The 10-year post-closure permit would allow the facility to continue environmental monitoring and maintenance of the East and West Retention Basins and the Monitoring Wells.

In addition to the draft Permit, DTSC also proposes to issue a Notice of Exemption under California Environmental Quality Act.

**Public Comment Period and Meeting**

The 45-day public comment period for the draft Permit begins on August 12, 2015 and ends on September 30, 2015. Copies of the Post Closure Permit Application, draft Permit and supporting documents can be viewed at the information repositories listed on page 4 in this fact sheet. Written and e-mailed comments must be postmarked by September 30, 2015, and sent to:

Mike Eshaghian, Project Manager
9211 Oakdale Avenue
Chatsworth, CA 91311
(818) 717-6679
Please e-mail comments to: Mike.eshaghi@dtsc.ca.gov

**Public Meeting:** August 27, 2015 at 6:00 p.m.
DTSC will hold a Public Meeting on August 27, 2015 at the Carson Community Center, North Entrance, Room 111, 801 E. Carson Street Carson, CA 90745 to explain draft Post Closure Permit, to address your questions, and accept your verbal and written comments.

For information on accessibility or to request reasonable accommodations, please contact Mary Sue Maurer toll-free at 1-866- 495-5651 or 818-717-6566 or by e-mail to Mary.Maurer@DTS.CA.GOV no later than August 24, 2015.

## Facility Description

Petroleum refining operations have been conducted at the site since 1923 when the Pan American Petroleum Company began operations. The Refinery is situated in a predominantly industrial area and is surrounded by a variety of manufacturing and petroleum-refining and storage facilities. The Refinery currently has the capacity to process approximately 260,000 barrels of crude oil per day to make gasoline, jet fuel, diesel, liquefied petroleum gas (LPG), sulfur, and petroleum coke. A cogeneration plant, located on site, produces power to supply the Refinery and to export to utilities.

The Refinery operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the basins is discharged to the Refinery's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District. The basins became regulated under the Resource Conservation and Recovery Act (RCRA) on September 25, 1990, due to promulgation of the Toxicity Characteristic Rule. The Refinery historically used the basins for emergency management of stormwater commingled with process water during large rainfall events

## Why a Permit is Necessary

DTSC regulates the generation, storage, treatment and disposal of hazardous waste in California. A permit enables DTSC to effectively regulate the hazardous waste management activities at facilities. Permits are developed after DTSC's detailed technical review, and are intended to ensure that the facility operates in a manner that protects human health and the environment.

DTSC is authorized to impose special conditions in this Permit pursuant to Health and Safety Code section 25200(a) and the regulations in California Code of Regulations, title 22, division 4.5 governing tanks, containers, and other facility and operation standards.

The California Regional Water Quality Control Board, Los Angeles Region is overseeing the corrective action at the facility under a Cleanup and Abatement Order.

## Post-Closure Permit Activities

Issuance of the 10-year post-closure permit will require the facility to:

- Conduct inspections and maintain the liner cover and the wells

- Monitor the groundwater to ensure that the closed Retention Basins are not contributing hazardous constituents to the groundwater

**California Environmental Quality Act**
Under the California Environmental Quality Act, DTSC must evaluate whether the proposed actions may have any significant impacts on human health and the environment. As part of this evaluation, DTSC has prepared a draft Notice of Exemption which concludes that issuance of the post-closure permit will not result in any impact to human health or the environment.

**Enforcement History**
DTSC inspects Tesoro Refining & Marketing Company, Carson Refinery on a regular basis to ensure they are in compliance with California laws, regulations, and the Permit conditions. The results of those inspections during the past five years are listed below:

1) April 14, 2009 - A full Compliance Evaluation Inspection was conducted. No violations were observed at the time of inspection.

2) June 29, 2009 - A Financial Review was completed and violations were found in TSD requirements.

3) April 26, 2010 - A Financial Review was completed and violations were found in TSD requirements.

4) October 19, 2011 - A full Compliance Evaluation Inspection was conducted. No violations were observed at the time of inspection.

5) October 21, 2014 - A full Compliance Evaluation Inspection was conducted. No violations were observed at the time of inspection.

All violations cited were corrected and settled with DTSC

**You can Participate in our Permitting Decisions**

The draft Post-Closure Permit, Post Closure Permit Application and other site-related documents are available for public review at the information repositories listed below. The entire administrative record is available in the DTSC office in Chatsworth.

Carson Regional Public Library
151 E. Carson Street
Carson, California 90745
(310) 830-0901
Monday through Thursday: 10:00 a.m. – 8:00 p.m.
Friday: 10:00 a.m. – 6:00 p.m.
Saturday: 10:00 a.m. – 5:00 p.m.
Sunday: 1:00 p.m. – 5:00 p.m.

Wilmington Library
1300 N. Avalon Blvd.
Wilmington, CA 90744
(310) 834-1082
Monday and Wednesday: 10:00a.m. – 8:00 p.m.
Tuesday and Thursday: 12:00 p.m. – 8:00 p.m.
Friday and Saturday: 9:30 .a.m. – 5:30 p.m.
Sunday: CLOSED

DTSC Chatsworth Regional Office
9211 Oakdale Avenue
Chatsworth, California 91311
Please call (818) 717-6621 for an appointment

To view electronic versions of the draft Post Closure Permit and other related documents, please visit our DTSC's EnviroStor website: http://www.envirostor.dtsc.ca.gov/public/. Enter "**Carson**" as the City and select Tesoro Refining & Marketing Company LLC, Carson Refinery. Click on the link for "Report" and then on the button for "**Community Involvement**."

**For More Information Contact**

Please contact any of the following individuals with any questions or concerns you may have regarding draft Permit or supporting documents:

For questions regarding the draft Post Closure Permit or Notice of Exemption, please contact Mr. Mike Eshaghian, DTSC Project Manager, at (818) 717-6679 or e-mail Mike.Eshaghi@dtsc.ca.gov.

For questions regarding Public Participation, please contact Mary Sue Maurer DTSC Public Participation Specialist, toll-free 866-495-5651 or 818-717-6566 or e-mail Mary.Maurer@dtsc.ca.gov.

**Notice to Hearing Impaired Individuals**

TDD users can obtain information about the Tesoro Refining & Marketing Company LLC, Carson Refinery by using the California State Relay Service at 888-877-5378. Please ask to speak to Mary Sue Maurer at 818-717-6566

## Glossary

**Post-Closure:** a regulated unit (for example a unit at a land disposal facility), with a Full Permit or Interim Status Document, which plans to close and leave waste in place rather than clean-close, the facility must obtain or maintain a post-closure permit from DTSC.

**Post-Closure Plan** contains a plan describing the activities to occur in preparation for and after post closure.

**Resource Conservation and Recovery Act** is a Federal statute which regulates facilities that treat, store or dispose of hazardous waste.

## Are You On DTSC's Mailing List For Tesoro Refining and Marketing Company LLC, Carson Refinery?

If you would like to be added or removed from the mailing list for Tesoro Refining & Marketing Company LLC, Carson Refinery , please complete the information below and return to Mary Sue Maurer, 9211 Oakdale Avenue, Chatsworth, CA 91311. You can e-mail your request to be added or removed from the mailing list to Mary.Maurer@dtsc.ca.gov.

☐ Please **remove** my name from the mailing list
☐ Please **add** my name to the mailing list

Name: _____

Address: _____

City/State/Zip: _____

Note: While this mailing list is solely for DTSC use, the list is considered a public record.

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

August 6, 2015

Robert Nguyen
Environmental Manager
Tesoro Refining & Marketing Company LLC
Los Angeles Refinery Carson Operations
Carson One Campus, MC 446G
2350 East 223rd Street.
Carson, California 90810

DRAFT POST CLOSURE PERMIT RENEWAL, EAST AND WEST RETENTION BASINS, TESORO REFINING & MARKETING COMPANY, CARSON REFINERY, 1801 E. SEPULVEDA BOULEVARD, CARSON, CALIFORNIA
EPA ID NUMBER CAD 077227049

Dear Mr. Nguyen:

The Department of Toxic Substances Control (DTSC) has prepared a draft Hazardous Waste Facility Post Closure Permit based on the Post Closure Permit Renewal Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions dated June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) for the Tesoro Refining & Marketing Company LLC, Carson Refinery located at 1801 East Sepulveda Boulevard in Carson, California.

DTSC has prepared the draft Post Closure Permit and Administrative Record for public review. Enclosed please find a complete package of all the documents which have been prepared for public review.

The public comment period for the draft Post Closure Permit starts August 12, 2015 and ends on September 30, 2015. A Public Meeting will be conducted on August 27, 2015 at 6:00 p.m. at the Carson Community Center, North Entrance, Room 111, 801 E. Carson Street, Carson, California 90745. DTSC will be proposing to approve the draft Post Closure Permit.

DTSC has also drafted a Notice of Exemption for the Post Closure Permit to comply with the California Environmental Quality Act.

Printed on Recycled Paper

If you have any questions regarding this letter, please contact the undersigned at (818) 717-6679.

Sincerely,

Mike Eshaghian

Mike Eshaghian
Project Manager
Permitting Branch

Enclosures

cc: Ms. Kateri Luka
Tesoro Refining & Marketing Company LLC
Los Angeles Refinery Carson Operations
Carson One Campus, MC 446G
2350 East 223rd Street.
Carson, California 90810

Ms. Sally Bilodeau, PG, CEG, CHG
AECOM
1220 Avenida Acaso
Camarillo, California 93012-8750

Mr. Mike Zabaneh, P.E.
Environmental Engineer/Project Manager
RCRA Permits Office
Lands Division
US EPA Region 9
Mail Code LND-4-2
75 Hawthorne Street
San Francisco, CA 94105

Mr. Phil Blum, P.E.,
Unit Supervisor
Permitting Branch
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Mr. Yun Zhang, P.G.
Geological Services Unit
Brownfields and Environmental Restoration Program
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Ms. Kathie Schievelbein
Environmental Analysis and Regulations
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Mr. Roberto Kou
Enforcement and Emergency Response Program
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Mr. Larry Ramirez
Department of Toxic Substances Control
Enforcement and Emergency Response Division
1515 Tollhouse Road
Clovis, California 93611

# CALIFORNIA ENVIRONMENTAL QUALITY ACT
# NOTICE OF EXEMPTION

To: Office of Planning and Research
State Clearinghouse
P.O. Box 3044, 1400 Tenth Street, Room 212
Sacramento, CA 95812-3044

From: Department of Toxic Substances Control
Office of Permitting
9211 Oakdale Avenue
Chatsworth, California 91311

Project Title: Post Closure Permit Renewal for East and West Retention Basins at Tesoro Carson Refinery

Project Location: 1801 East Sepulveda Blvd, Carson, California

County: Los Angeles

Project Description:

The Department of Toxic Substances Control (DTSC) has approved a Post Closure Permit Renewal (PCP) for the East and West Retention Basins at the Tesoro Refining & Marketing Company LLC, Carson Refinery pursuant to authority granted under Chapter 6.5, sections 25150, 25159 and 25159.5 of the California Health and Safety Code. The East and West Retention Basins are subject to post-closure care because DTSC required clean-up standards for groundwater contamination which could not be met during closure activities. The Post Closure Permit Application outlines procedures for environmental monitoring, operation and maintenance of the post closure units as well as well monitoring and the mechanisms to fund the post closure activities over 30 years. The resulting Post Closure Permit is written to cover a 10-year period. Within twelve (12) months of issuance of this approval, Tesoro and DTSC shall sign and record in a Land Use Covenant to restrict use of the East and West Retention Basins to industrial activities.

Background:

The Refinery historically used the East and West Retention Basins under normal operating conditions. Excess water from rainfall, together with untreated process water used as a coolant, was temporarily stored in the basins. The water was treated at the refinery's wastewater treatment plant and then discharged to the Los Angeles County Sanitation District (LACSD). The basins are located within the centrally positioned Main Refinery area which includes refining facilities, a cogeneration plant, the majority of the refinery's product shipping facilities and a product storage area. The East Basin has a useable volume of 4,320,000 gallons which allows for 1 foot of freeboard. The West Basin has a useable volume of 10,230,000 gallons which allows for 1 foot of freeboard.

The basins became regulated under the Resource Conservation and Recovery Act (RCRA) on September 25, 1990, upon determination that water discharged to the impoundments contained benzene concentrations that at times exceeded the Toxicity Characteristic Leaching Procedure criterion for benzene (D018). Closure was approved by DTSC on December 4, 1997. Closure procedures included decontamination, crack repair, and sealant application.

To date, the basins have been in post-closure care (1997-2014). The Refinery now operates the basins as surface impoundments for emergency management of non-hazardous waters, including storm water and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin during storm events. The basins do not receive dry weather flow. Water temporarily stored in the basins is discharged to the refinery wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District (LACSD) under an Industrial Wastewater Discharge Permit. Since final closure, there have been no reports of hazardous waste management in the basins. Recent inspections have revealed no structural failures or malfunctions.

Project Activities:

1. Continuation of the current use of the two basins for the temporary storage of non-hazardous comingled storm water, process water overflow during large storms, and the occasional storage of fire deluge testing water.
2. Maintenance of the basin liners and pumps by regular inspection and corrective action.
3. Environmental monitoring, consisting of implementation of the revised RCRA Basin Corrective action Groundwater monitoring plan, including monitoring 13 wells.
4. Provision for financial mechanisms to fund the above post-closure activities throughout the 30-year post-closure care period.

The system in place to monitor the hydrology underneath the two basins has been determined to be adequate by the DTSC Geological Services unit. The discharges from the basins are regulated pursuant to an Industrial Waste Discharge

Permit by LACSD. The temporary intermittent use of the two basins will be subject to special conditions included in the Tesoro Carson Refinery post-closure permit. Within twelve (12) months of issuance of this approval, Tesoro and DTSC shall sign and record in a Land Use Covenant to restrict use of the East and West Retention Basins to industrial activities.

Name of Public Agency Approving Project: Department of Toxic Substances Control

Name of Person or Agency Carrying Out Project: Tesoro Refining & Marketing Company LLC, Carson Refinery

Exemption Status: (check one)

☐ Ministerial [PRC, Sec. 21080(b)(1); CCR, Sec. 15268]
☐ Declared Emergency [PRC, Sec. 21080(b)(3); CCR, Sec.15269(a)]
☐ Emergency Project [PRC, Sec. 21080(b)(4); CCR, Sec.15269(b)(c)]
☐ Categorical Exemption: [State type and section number]
☐ Statutory Exemptions: [State code section number]
☒ General Rule [CCR, Sec. 15061(b)(3)]

Exemption Title:

General Rule: No Possibility That The Activities In Question Will Result In A Significant Environmental Effect

Reasons Why Project is Exempt:

The project will not result in a change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Therefore, DTSC finds with certainty that there is not possibility that the activities in question will result in a significant environmental effect.

| Mike Eshaghian | Hazardous Substances Engineer | (818) 717-6679 |
|---|---|---|
| Project Manager Name | Project Manager Title | Phone # |

| | |
|---|---|
| Unit Chief Signature | Date |

| Phil Blum, P.E. | Supervising Hazardous Substances Engineer | (818) 717-6694 |
|---|---|---|
| Unit Chief Name | Unit Chief Title | Phone # |

TO BE COMPLETED BY OPR ONLY

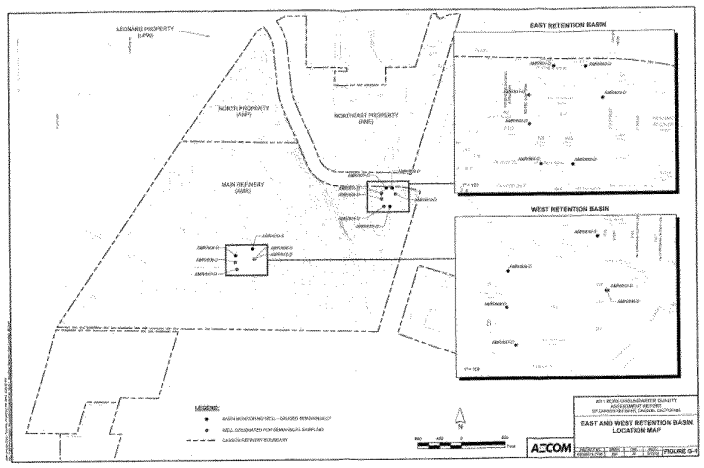
Date Received For Filing and Posting at OPR:

# STATEMENT OF BASIS

Prepared by
California Department of Toxic Substances Control

For
Tesoro Refining & Marketing Company LLC
Carson Refinery
1801 E. Sepulveda Blvd.
Carson, California 90810
August 12, 2015

**Facility/Unit Type:** Post Closure Facility
**Waste Types:** Emergency management of non-hazardous waters, including stormwater during large storm events.
**Permit Type:** RCRA Hazardous Waste Post Closure Permit




## 1. INTRODUCTION

This Statement of Basis has been prepared by the Department of Toxic Substances Control (DTSC) to document the draft RCRA hazardous waste permit decision (permit) for Tesoro Refining and Marketing Company, Carson Refinery. The facility is located at 1801 E. Sepulveda Blvd., Carson, in Los Angeles County, California.

**Document Organization**

This Statement of Basis is divided into five (5) sections as follows:

1. INTRODUCTION
2. FACILITY DESCRIPTION
3. DRAFT PERMIT CONDITIONS
4. CEQA
5. NEXT STEPS

**List of Acronyms**

| | |
|---|---|
| CEQA | California Environmental Quality Act |
| DTSC | Department of Toxic Substances Control |
| DOT | Department of Transportation |
| HWMU | Hazardous Waste Management Unit |
| RCRA | Resource Conservation and Recovery Act |
| SWMU | Solid Waste Management Unit |

## 2. FACILITY DESCRIPTION

The Facility is situated in a predominantly industrial area and is surrounded by a variety of manufacturing and petroleum-refining and storage facilities. The Facility currently has the capacity to process approximately 260,000 barrels of crude oil per day to make gasoline, jet fuel, diesel, liquefied petroleum gas (LPG), sulfur, and petroleum coke. A cogeneration plant, located on site, produces power to supply the Refinery and to export to utilities.

The Facility operates the East and West Retention Basins as surface impoundments for emergency management of non-hazardous waters, including stormwater and mixed process water during large storm events. Fire deluge (the fire deluge water stream) is occasionally routed to the East Retention Basin. Water temporarily stored in the Retention Basins is discharged to the Facility's wastewater treatment system and subsequently discharged to the Los Angeles County Sanitation District.

## 3. DRAFT PERMIT CONDITIONS

The following section briefly describes the derivation of the conditions of the Draft Permit and the reasons for them. There are four types of conditions in the draft permit – General Conditions, Unit-Specific Special Conditions, Special Conditions, and Conditions for Corrective Action.

General Conditions (Part III)

*1. PERMIT APPLICATION DOCUMENTS*

*The revised Part "A" Application dated November 7, 2013 and the DTSC-approved revised Post Closure Permit Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions submitted on June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) are hereby made a part of this Permit by reference.*



ED_001593_00025583

2. *EFFECT OF PERMIT*

(a) *The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations, title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility*

(b) *The Permittee is permitted to store hazardous wastes in accordance with the terms and conditions of this Permit. Any management of hazardous wastes not specifically authorized in this Permit is strictly prohibited.*

(c) *Compliance with the terms and conditions of this Permit does not constitute a defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment.*

(d) *DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.*

(e) *Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.*

(f) *Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., tit. 22, §66270.43).*

(g) *In case of conflicts between the Operation Plan and the Permit, the Permit conditions take precedence.*

(h) *This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards and any conditions imposed pursuant to section 13227 of the Water Code.*

3. *COMPLIANCE WITH CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)*

*A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in California Code of Regulations, title 14, section 15070 et seq.*

4. *ACCESS*

(a) *DTSC, its contractors, employees, agents, and/or any United State Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.*

(b) *Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.*

5. *ENVIRONMENTAL MONITORING (PART III)*

*The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6.*

*(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility are those described in Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application.*

*(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1 of the Approved Application.*

*(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility are described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.1; of the Approved Application. During future sampling events, if the Facility finds constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Facility shall add them to the list of COCs.*

*(d) For the purpose of California Code of Regulations, title 22, section 66264.94, the Concentration Limits for the Facility are described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.1 of the Approved Application.*

*(e) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 4.1 of the Approved Application.*

*(f) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility are described in Appendix 3a, RCRA Retention Basins Post Closure Plan, section 2.2 of the Approved Application; and Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.2 of the Approved Application.*

*(g) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility is described in Appendix 6, RCRA Basins Groundwater Monitoring Plan, section 2.1.3 of the Approved Application and shall be 30 years beginning with the date of the issuance of this post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.*

*(h) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility is described in Appendix 6, RCRA Retention Basins Groundwater Monitoring Plan, section 4.0 of the Approved Application. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application.*

*(i) The Facility shall comply with the requirements of the Los Angeles Regional Water Quality Control Board (LARWQCB) issued Cleanup and Abatement Order (CAO) No. 90-121 to Atlantic Richfield Company and any subsequent Order. Requirements of the CAO included identification of sources, delineation of plumes, recovery of light non-aqueous phase liquid (LNAPL) throughout the site, and initiation of dissolved-plume cleanup.*

SPECIAL CONDITIONS (Part V)

The purpose of these conditions is to identify in detail any compliance schedule and special conditions that apply to the facility and the regulated units. These conditions may be used to modify and/or supplement the Post Closure Permit Application.

(a) The Permittee shall comply with the requirements of the LARWQCB issued CAO No. 90-121 to Atlantic Richfield Company and any subsequent Order. The Permittee shall monitor the groundwater in accordance with the Order and any subsequent order and in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. The Permittee shall simultaneously provide to DTSC a copy of all the submittals required by the RWQCB.

(b) The Permittee shall comply with the Annual Report requirements specified in California Code of Regulations, title 22, chapter 14 and shall include the monitoring and response program data in its annual report. In addition, the Permittee shall submit a post closure semiannual groundwater monitoring report after each semiannual groundwater monitoring and sampling event to DTSC.

(c) Post-closure inspection and maintenance of the Retention Basins includes annual inspection and repair if needed of the post-closure structures and the warning signs. Post-closure structures associated with each Retention Basins include the Retention Basin walls, liners, and pumps

(d) The Permittee shall conduct annual groundwater monitoring and periodic site inspection, repair and maintenance activities during the post closure care period in accordance with Appendix 6, RCRA Basins Groundwater Monitoring Plan of the Approved Application. Additional inspections will be performed after any earthquakes of sufficient magnitude or intensity to potentially cause damage to Retention Basin structures.

(e) The Permittee shall maintain the Retention Basins so that it is free of cracks, spalling, and gaps upon visual inspection of the liner. The Permittee shall immediately repair all cracks, spalling and gaps upon detection in the liner and/or the basal structure of the Retention Basins.

(f) When more than 3 feet of stormwater and/or non-hazardous wastewater have accumulated in a Retention Basin, the Permittee will collect a representative sample in laboratory supplied container (s) and analyze it for total benzene (D018) using USEPA Method 8260B. The results of the water analysis shall be included in a semiannual groundwater monitoring report submitted to DTSC. If a sample exceeds 0.5 mg/l of benzene, DTSC shall be notified by telephone or e-mail within 24 hours of receipt of the analytical results. Written notification accompanied by the certified analytical report will be provided within 7 days from the verbal or e-mail notification or seven days following receipt of the final laboratory report, whichever is later. The notification shall include but not be limited to the following:

1) Date of use;
2) Storage duration;
3) Volume of wastewater;
4) Analytical results of wastewater(If the sampling results shows benzene concentrations exceeding 0.5 mg/L, the report shall explain the reasons and sources of the higher benzene concentrations in the wastewater or storm water);
5) Air monitoring results if any;
6) Type of emergency which required the use of the Retention Basins.

(g) The Permittee shall not store any hazardous waste in the Retention Basins. The Permittee shall immediately test storm water in the Retention Basins following an emergency or use and commence immediate pumping of the storm, after sampling, back into the treatment systems when capacity is available. The Permittee shall follow the notification requirements specified in item (g). If the sludge is determined to be a hazardous waste, the Permittee shall send it offsite for treatment or disposal at an authorized hazardous waste treatment or disposal facility.

(h) The Permittee shall maintain a minimum of 1-foot of freeboard when the Retention Basins are in use.

(i) The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1. The Annual Groundwater Monitoring and Response Program Report may be submitted simultaneously to DTSC and RWQCB by each March 1.

(j) Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 360 days of the approval of this Permit, the Permittee shall have a DTSC-approved Land Use Covenant signed and recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement by check payable to the Department of Toxic Substances Control and shall be sent

to: Accounting Unit, Department of Toxics Substances Control, P.O. Box 806, Sacramento, California 95812-0806. All checks shall reference the name and address of the Facility.
(k) The Permittee shall maintain the financial mechanism dated 3/23/2015 that was approved by DTSC for a total of $29,636,000 ($10,660,000 is for post closure as it is calculated in Appendix 5, Table 8, Post-Closure Cost Estimate Financial Assurance Documentation of the approved Application and the balance is maintained for corrective action) to demonstrate financial assurance for post closure and corrective action.

CORRECTIVE ACTION (Part VI)

The following conditions listed in this section are included in draft post closure permit since Water Board is the Lead Agency overseeing the corrective action at the facility.

> The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the LARWQCB pursuant to the Cleanup and CAO No. 90-121 and any other subsequent orders or requirements by the LARWQCB or US EPA.

## 4. CEQA

In compliance with the California Environmental Quality Act (CEQA), DTSC considered the impacts of this draft permit decision on the environment by preparing an Initial Study. From this Initial Study, DTSC concluded that there were no significant impacts to the environment. Consistent with this finding, DTSC has prepared a Notice of Exemption in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in California Code of Regulations, title 14, section 15070 et seq. that will be finalized and filed concurrently with the final permit decision.

## 5. NEXT STEPS

DTSC encourages public comments and feedback on the draft Post Closure Permit for Tesoro Refining and Marketing Company, Carson Refinery. Comments can be submitted to the DTSC staff listed below any time starting on August 12, 2015 and before the close of the public comment period on September 30, 2015.

Send all public comments by September 30, 2015 to:

Mr. Mike Eshaghian, Project Manager, 9211 Oakdale Avenue, Chatsworth, California 91311 Phone Number (818) 717-6679 Or by e-mail to Mike.Eshaghian@dtsc.ca.gov.

DTSC will host a public meeting to discuss the draft post closure permit on Thursday Aug. 27, 2015 at Carson Community Center, North Entrance, Room 111, 801 E. Carson Street, Carson, CA 90745.

Open House: 6:00-6:30pm
Presentation: 6:30-7:30pm

# COMMUNITY GATE

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

# Tesoro Refining and Marketing Company LLC

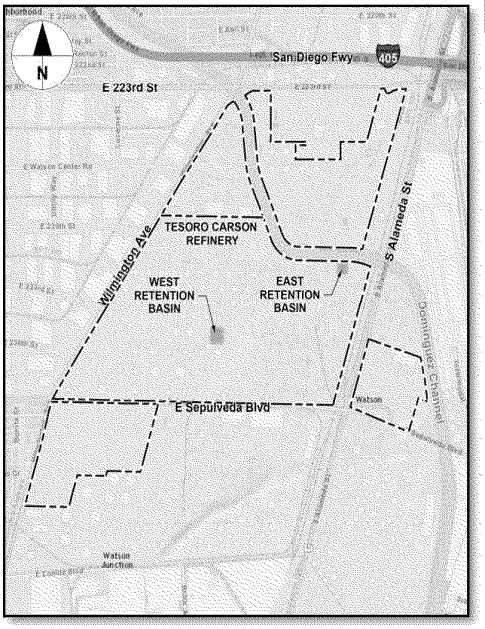
## Carson Refinery-East and West Retention Basins

## 1801 E. Sepulveda Blvd., Carson, CA

The Department of Toxic Substances Control (DTSC) invites you to review and comment on the draft Post-Closure Permit for the East and West Retention Basins (Basins) at the Tesoro Refining and Marketing Company LLC, Carson Refinery (Carson Refinery).

### Site Description and History

There are two Basins located within the Carson Refinery. The Basins are like large concrete ponds. They sometimes held process water that may have contained hazardous concentrations of benzene mixed with storm water. In 1997 they were closed. In 2003, DTSC approved a post-closure permit for the Basins. They have remained mostly empty since that time. In an emergency they are sometimes used to hold non-hazardous waste water and storm water. The East Basin is 200 feet by 210 feet with an average depth of 19 feet. The West Basin is 269 feet by 300 feet with an average depth of 22 feet.




### Why is a Post-Closure Permit Needed?

This is the second Post-Closure Permit for the two Basins. The permit is required to make sure the two Basins are safely maintained and groundwater wells are monitored. Each Permit lasts for 10 years. The Los Angeles Regional Quality Control Board is overseeing the cleanup of soil and groundwater contamination at the Carson Refinery.

## PUBLIC MEETING

**You are invited to learn more about this Draft Post-Closure Permit at a public meeting:**

**Thursday, Aug. 27, 2015**
**Carson Community Center**
**North Entrance, Room 111**
**801 E. Carson Street**
**Carson, CA 90745**

**Open House: 6:00-6:30pm**
**Presentation: 6:30-7:30pm**

**Public Comment Period**
**Aug. 12—Sept. 30, 2015**

All comments will be considered before a decision is made. Comments must be postmarked, emailed or faxed by **Sept. 30, 2015** to:

**Mike Eshaghian**
**DTSC Project Manager**
**9211 Oakdale Avenue**
**Chatsworth, CA 91311**
**Mike.Eshaghian@dtsc.ca.gov**
**Office: (818) 717-6679**
**Fax: (818) 717-6631**

Documents about this site and the draft Post-Closure Permit are available at the repositories on the back.



HEARING IMPAIRED INDIVIDUALS may use the California Relay Service at 1-888-877-5378 (TDD)

**What Happens During a Post-Closure Permit?**
DTSC oversees the permit and conducts inspections. The Basins and water pumps are checked and repaired if needed. Two times a year, g roundwater wells are sampled for chemicals. Water wells on the refinery's property are measured and also tested. (This water is not used for drinking.) These wells are repaired and replaced as needed. Caution signs must be posted according to law. Reports with all test results are provided to DTSC two times a year.

**California Environmental Quality Act (CEQA)**
In compliance with CEQA, DTSC must evaluate if the Post-Closure Permit may have any significant effect on human health and the environment. In response, DTSC prepared a Notice of Exemption (NOE) which concludes that the re -issuance of the Post -Closure Permit will not have a significant negative effect on human health or the environment.

**Where to Find Project Documents:**
Carson Regional Public Library
151 E. Carson Street
Carson, California 90745
(310) 830-0901
Monday through Thursday: 10:00 a.m. – 8:00 p.m.
Friday: 10:00 a.m. – 6:00 p.m.
Saturday: 10:00 a.m. – 5:00 p.m.
Sunday: 1:00 p.m. – 5:00 p.m.

Wilmington Library
1300 N. Avalon Blvd.
Wilmington, CA 90744
(310) 834-1082
Monday and Wednesday: 10:00a.m. – 8:00 p.m.
Tuesday and Thursday: 12:00 p.m. – 8:00 p.m.
Friday and Saturday: 9:30 .a.m. – 5:30 p.m.
Sunday: CLOSED

DTSC Chatsworth Regional Office
9211 Oakdale Avenue
Chatsworth, California 91311
Please call (818) 717-6621 for an appointment

To view project documents, including the Draft Post - Closure Permit, go to DTSC's Envirostor website:
http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD077227049&starttab=

**Next Steps**
After the public comment period ends, DTSC will review and evaluate any comments received. After the public comments have bee n considered, DTSC will issue a Response to Comments (RTC) document. The RTC will be mailed to individuals who submitted a written comment that included an e -mail or postal mailing address. DTSC will then make a final decision on the Post-Closure Permit.

**Enforcement History**
DTSC has no t found any violations of the permit in the past five years. All inspection reports are available at:
**http://www.envirostor.dtsc.ca.gov/public/eerp_profile_report.asp?global_id=3000212**

**Who to Contact at DTSC For More Information:**


| | |
|---|---|
| Mike Eshaghian | Mary Sue Maurer |
| DTSC Project Manager | DTSC Public Participation |
| 9211 Oakdale Avenue | 9211 Oakdale Avenue |
| Chatsworth, CA 91311 | Chatsworth, CA 91311 |
| Mike.eshaghian@dtsc.ca.gov | Mary.Maurer@dtsc.ca.gov |
| Office: (818) 717-6679 | Office: (818) 717-6566 |
| Fax: (818) 717-6527 | Fax: (818) 717-6575 |


Si prefiere hablar con alguien en español acerca de ésta información, favor de llamar a Ricardo Gonzalez, Departamento de Control de Substancias Tóxicas. El número de teléfono es 818-717-6693.

All of DTSC's public participation documents can be made into an alternate format (i.e. Braille, large print, etc.) in another language as appropriate, in accordance with state and federal law.

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

August 6, 2015

Library Manager
Wilmington Library
1300 N. Avalon Blvd.
Wilmington, California 90744

INFORMATION REPOSITORY FOR DRAFT POST CLOSURE PERMIT RENEWAL, EAST AND WEST RETENTION BASINS, TESORO REFINING & MARKETING COMPANY, CARSON REFINERY, 1801 E. SEPULVEDA BOULEVARD, CARSON, CALIFORNIA, EPA ID NUMBER CAD 077227049

Dear Library Manager:

The Department of Toxic Substances Control (DTSC) has completed the technical review of the Post Closure Permit Application dated September 2013 which was submitted on November 25, 2013 with subsequent revisions dated June 17, 2014, July 7, 2014 and December 9, 2014 (Approved Application) for the Tesoro Refining & Marketing Company LLC, Carson Refinery located at 1801 East Sepulveda Boulevard in Carson, California. DTSC has prepared the draft Post Closure Permit and Administrative Record for public review. Enclosed please find a complete package of all the documents which have been prepared for public review. Please make these documents available as part of the information repository for the facility.

The public comment period for the draft Post Closure Permit starts August 12, 2015 and ends on September 30, 2015. A Public Meeting will be conducted on August 27, 2015 at 6:00 p.m. at the Carson Community Center, North Entrance, Room 111, 801 E. Carson Street, Carson, CA 90745. DTSC will be proposing to approve the draft Post Closure Permit.

Thank you for your cooperation. If you have any questions regarding this letter, please contact the undersigned at (818) 717-6679.

Sincerely,

Mike Eshaghian

Mike Eshaghian
Project Manager
Permitting Branch

Enclosures

Printed on Recycled Paper

cc: Ms. Kateri Luka
Tesoro Refining & Marketing Company LLC
Los Angeles Refinery Carson Operations
Carson One Campus, MC 446G
2350 East 223rd Street.
Carson, California 90810

Ms. Sally Bilodeau, PG, CEG, CHG
AECOM
1220 Avenida Acaso
Camarillo, California 93012-8750

Mr. Phil Blum, P.E.,
Unit Supervisor
Permitting Branch
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Ms. Mary Sue Maurer
Public Participation
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**From:** Sommer, Tab
**Sent:** Thur 4/6/2017 8:57:00 PM
**Subject:** FW: Note on Torrance Refinery

Mike

This is what was sent to my Office Director

See forwarded e-mail

**From:** Kohler, Amanda
**Sent:** Thursday, April 06, 2017 3:53 PM
**To:** ORCR IO <ORCR_IO@epa.gov>
**Cc:** Sasseville, Sonya <Sasseville.Sonya@epa.gov>; Guernica, Mimi <Guernica.Mimi@epa.gov>; Sommer, Tab <Sommer.Tab@epa.gov>; Mooney, Charlotte <Mooney.Charlotte@epa.gov>; Barr, Linda <Barr.Linda@epa.gov>
**Subject:** Note on Torrance Refinery

Barnes, et al. --

Following up to senior staff, here's a quick note on the Torrance refinery using information we pulled as well as information from Region 9 --

**Mobile Oil, Torrance Refinery (aka, Torrance Refining Company LLC) TSD Activity:***

Currently, there are no TSD units actively regulated under federal RCRA standards at the site. The facility submitted a Part A application and was originally granted interim status for six units in 1981, but the units are no longer operating and no longer actively manage RCRA hazardous waste. The facility is an LQG and has a Tiered Permit from CUPA (Certified Unified Program Agency) that work for counties or big cities that implement the California generator requirements under Subtitle C.

The site is on the Corrective Action baseline because the program still considers the facility to have interim status.

* The refinery named “Mobile Oil, Torrance Refinery,” that is stated in the briefing paper, has a California ID of 71002204, but it does not have a EPA ID. Another site “Torrance Refining Company LLC” is listed at the same address (3700 W. 190TH St. Torrance, CA) with an EPA ID CAD008354052. In RCRAInfo, it shows that the second ID has six units that are all coded as delisted units and protective filers. (There may be some conflicting data.)

**To:** Tai, Lung-yin@DTSC[Lung-yin.Tai@dtsc.ca.gov]
**Cc:** jchin@chevron.com[jchin@chevron.com]; jamesvoyles@chevron.com[jamesvoyles@chevron.com]; brogers@chevron.com[brogers@chevron.com]; Friedman, Alan@Waterboards[Alan.Friedman@waterboards.ca.gov]; Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]; Nazemi, Mohsen@DTSC[Mohsen.Nazemi@dtsc.ca.gov]; Sullivan, Robert@DTSC[Robert.Sullivan@dtsc.ca.gov]; Cross, Jay@DTSC[Jay.Cross@dtsc.ca.gov]; Kowbel, Nelline@DTSC[Nelline.Kowbel@dtsc.ca.gov]; Edward.Nieto_dtsc.ca.gov[Edward.Nieto@dtsc.ca.gov]
**From:** Ruffin, Paul@DTSC
**Sent:** Mon 7/17/2017 10:14:10 PM
**Subject:** RE: Chevron Richmond Refinery Landfarms Post-Closure Permit - Request for Administrative Record

The Permit Appeals Officer has approved your request to provide the administrative record for the Chevron Richmond Refinery Landfarms Post-Closure Permit on July 21, 2017.

Paul Ruffin

Hazardous Substances Engineer

Brownfields and Environmental Restoration Program

Department of Toxic Substances Control

8800 Cal Center Drive

Sacramento, California 95826-3200

(916) 255-6677

appeals@dtsc.ca.gov

**From:** Tai, Lung-yin@DTSC
**Sent:** Thursday, July 13, 2017 2:49 PM
**To:** Ruffin, Paul@DTSC
**Cc:** Nazemi, Mohsen@DTSC; Sullivan, Robert@DTSC; Cross, Jay@DTSC; Nieto, Edward@DTSC
**Subject:** RE: Chevron Richmond Refinery Landfarms Post-Closure Permit - Request for Administrative Record

Hi Paul,

I am sending this email to you that the Administrative Record Documents you requested for the review for Chevron's Appeal Petition for Permit Decision are prepared in U drive. However, our Attorney assigned for this project, Jay Cross, would like to request for an extension of at least two days to preview the documents. I am request for this extension to four days, i.e. 7/21/17, in case a final adjustment is needed or there is a need to make copies of compact disks. Thanks.

Lewis

**From:** Ruffin, Paul@DTSC
**Sent:** Wednesday, June 28, 2017 7:00 PM
**To:** Tai, Lung-yin@DTSC
**Cc:** jchin@chevron.com; jamesvoyles@chevron.com; Friedman, Alan@Waterboards; bkrishnaswarmy@baaqmd.gov; zabaneh.mahfouz@epa.gov; Nazemi, Mohsen@DTSC; Sullivan, Robert@DTSC; Cross, Jay@DTSC; Kowbel, Nelline@DTSC; Nieto, Edward@DTSC
**Subject:** Chevron Richmond Refinery Landfarms Post-Closure Permit - Request for Administrative Record

I am assisting the Permit Appeals Officer, Mr. Mohsen Nazemi, with the appeal of the post-closure permit decision issued on May 19, 2017, for the Chevron USA, Inc. facility in Richmond, California (EPA Id. No. CAD009114919).

I am requesting the administrative record for the Chevron Landfarms 1-5 Post-Closure Permit decision. The requirements for the administrative record for the draft and final permit are specified in California Code of Regulations, title 22, sections 66271.8 and 66271.17. The attached file also identifies the supporting documents that should be included in the administrative record. Also, please include the sign-in sheets for the public hearing for the draft modified permit. Prepare three (3) copies of the administrative record on compact disks. Please have the documents in chronological order and include a table of contents or index of the documents. If any of the administrative record documents are not provided or are missing, please identify the documents and describe why they were not provided.

We need the administrative record documents for our analysis. If you could have them ready by July 17th, that would be helpful. If there is some reason you cannot have them prepared within this time frame, please let us know as soon as possible and provide a date when the

administrative record will be provided.

Also, please send to me the project contact list for the owner/operator and attorney, responsible agencies, and DTSC staff with titles, addresses, phone numbers, and e-mail addresses. In particular, please send me the e-mail address for Mr. Bradley Rogers, Chevron Environmental Management Company, now.

Thank you for your time and efforts.

Paul Ruffin

Hazardous Substances Engineer

Brownfields and Environmental Restoration Program

Department of Toxic Substances Control

8800 Cal Center Drive

Sacramento, California 95826-3200

Appeals@dtsc.ca.gov

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Wed 8/31/2016 5:53:21 PM
**Subject:** Phillips 66 San Francisco Refinery Public Notice for Land Treatment Area Draft Post Closure
Phillips 66 Public Notice Sept 6-2016.docx

Hi Mike,

I just wanted to let you know that we will be public noticing the Phillips 66 San Francisco Refinery Public Notice for Land Treatment Area Draft Post Closure on September 6, 2016. I have attached a copy of the public notice for you. I will send you a package by mail later today. Thanks.

p.s. I have not yet uploaded documents in the envirostor. I will do it tomorrow. Thanks.

**To:** Tai, Lung-yin@DTSC[Lung-yin.Tai@dtsc.ca.gov]
**Cc:** jchin@chevron.com[jchin@chevron.com]; jamesvoyles@chevron.com[jamesvoyles@chevron.com]; Friedman, Alan@Waterboards[Alan.Friedman@waterboards.ca.gov]; bkrishnaswarmy@baaqmd.gov[bkrishnaswarmy@baaqmd.gov]; Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]; Nazemi, Mohsen@DTSC[Mohsen.Nazemi@dtsc.ca.gov]; Sullivan, Robert@DTSC[Robert.Sullivan@dtsc.ca.gov]; Cross, Jay@DTSC[Jay.Cross@dtsc.ca.gov]; Kowbel, Nelline@DTSC[Nelline.Kowbel@dtsc.ca.gov]; Edward.Nieto_dtsc.ca.gov[Edward.Nieto@dtsc.ca.gov]
**From:** Ruffin, Paul@DTSC
**Sent:** Thur 6/29/2017 1:59:34 AM
**Subject:** Chevron Richmond Refinery Landfarms Post-Closure Permit - Request for Administrative Record
Encl 2 - Permitting Checklist.pdf

I am assisting the Permit Appeals Officer, Mr. Mohsen Nazemi, with the appeal of the post-closure permit decision issued on May 19, 2017, for the Chevron USA, Inc. facility in Richmond, California (EPA Id. No. CAD009114919).

I am requesting the administrative record for the Chevron Landfarms 1-5 Post-Closure Permit decision. The requirements for the administrative record for the draft and final permit are specified in California Code of Regulations, title 22, sections 66271.8 and 66271.17. The attached file also identifies the supporting documents that should be included in the administrative record. Also, please include the sign-in sheets for the public hearing for the draft modified permit. Prepare three (3) copies of the administrative record on compact disks. Please have the documents in chronological order and include a table of contents or index of the documents. If any of the administrative record documents are not provided or are missing, please identify the documents and describe why they were not provided.

We need the administrative record documents for our analysis. If you could have them ready by July 17th, that would be helpful. If there is some reason you cannot have them prepared within this time frame, please let us know as soon as possible and provide a date when the administrative record will be provided.

Also, please send to me the project contact list for the owner/operator and attorney, responsible agencies, and DTSC staff with titles, addresses, phone numbers, and e-mail addresses. In particular, please send me the e-mail address for Mr. Bradley Rogers, Chevron Environmental Management Company, now.

Thank you for your time and efforts.

Paul Ruffin

Hazardous Substances Engineer

Brownfields and Environmental Restoration Program

Department of Toxic Substances Control

8800 Cal Center Drive

Sacramento, California 95826-3200

Appeals@dtsc.ca.gov

CHECKLIST FOR ADMINISTRATIVE RECORD DOCUMENTS FOR DRAFT (CCR, SECTION 66271.8) & FINAL PERMITS (CCR, SECTION 66271.17)

| ADMINISTRATIVE RECORD DOCUMENTS | SPECIFICALLY SPECIFIED IN CCR SECTIONS 66271.8 DRAFT PERMIT | 66271.17 FINAL PERMIT | SUPPORT DOCUMENTS FOR DRAFT & FINAL PERMIT |
|---|---|---|---|
| Part A application | X | X | |
| Part B application | X | X | |
| Initial Completeness Checklist | | | X |
| Notice of Deficiency | | | X |
| Pre-Permit Inspection Reports | | | X |
| Technical Support Data | X | | |
| Financial Responsibility Compliance | | | X |
| Interagency Correspondence potentially sensitive Documents) | | | X |
| Internal Memoranda | | | X |
| Enforcement Activity Documents | | | X |
| Technical Review Checklist | | | X |
| Closure Plan (if applicable) | | | X |
| Post-Closure Plan (if Applicable) | | | X |
| State & Federal Draft Permits | | | X |
| Notice of Intent to Deny (if applicable) | X | | |
| Preliminary RFA Report (if applicable) | | | X |
| RFA Report (if applicable) | | | X |

| ADMINISTRATIVE RECORD DOCUMENTS | SPECIFICALLY SPECIFIED IN CCR SECTIONS 66271.8 DRAFT PERMIT | 66271.17 FINAL PERMIT | SUPPORT DOCUMENTS FOR DRAFT & FINAL PERMIT |
|---|---|---|---|
| Permit Maintenance Documents | | | X |
| Corrective Action Plan | | | X |
| Groundwater Maintenance Documents | | | X |
| General Correspondence with Facility | | | X |
| DTSC Fact Sheet/Statement of Basis | X | X | |
| Statement of Basis for Denial (if applicable) | X | | |
| Mailing List | | | X |
| Public Notice Text | | | X |
| Public Notice Proof of Publication (newspaper & radio) | | | X |
| Tape or Transcript of the Public Hearing | | X | |
| Written Comments Received | | X | |
| Response to Comments | | X | |
| Changes to Draft Permit | | | X |
| Public Participation Plan (if necessary) | | | X |
| CEQA documents | | | X |
| Final Permit | | X | |
| Unit Closure Oversight Certification | | | X |

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**From:** Nieto, Edward@DTSC
**Sent:** Thur 4/6/2017 3:33:26 PM
**Subject:** Torrance refinery
SOOTorranceRefinery (PBF Energy).pdf
CoverLetterTorranceRefining2016.pdf
InspectionReportTorranceRefiningCompany2016.pdf
Presentation-on-CalEPA-s-Regulated-Site-Portal-April-12-2017.pdf

Mike,

I looked at our Enforcement Envirstor and came accrosst hese 4 documents based on a recent complaint. Can't tell if these are public documents. More info that is public can be found at http://www.envirostor.dtsc.ca.gov/public/cerp_profile_report.asp?global_id=3000737

Ed

# Department of Toxic Substances Control

*Matthew Rodriquez*
Secretary for
Environmental Protection

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

*Edmund G. Brown Jr.*
Governor

**CERTIFIED MAIL**

November 21, 2016

Ms. Penny Wirsing
Environmental Section Supervisor
3700 W. 190th Street
Torrance, California 90504

Dear Ms. Wirsing:

On October 13, 2016 The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), conducted a complaint investigation at Torrance Refining Company, located at 3700 W. 190th Street, Torrance, California 90504. The enclosed report describes the findings of this inspection.

All pertinent information derived from this inspection, including documents are included as attachments to the report. This report will become a public document: you may request that any trade secret or facility security information be withheld from public disclosure. (See Health and Safety Code Section 25173).

If you have any questions regarding this letter, or if you wish to meet with the Department to discuss any questions or concerns you have with the inspection or the report, please call Ms. Ellen Pates, Environmental Scientist at (714) 484-5372.

Sincerely,

Richard Hubbell

Richard Hubbell
Unit Chief
Enforcement and Emergency Response Division
Cal/EPA - Department of Toxic Substances Control

Certified Mail
7013 1090 0001 2616 7598
Return Receipt Requested

Printed on Recycled Paper

# COMPLAINT INVESTIGATION REPORT

## I. GENERAL INFORMATION

Company Name: **Torrance Refining Company LLC (PBF Energy)**

Facility Address: **3700 W. 190th Street Torrance, California 90504**

EPA ID Number: **CAD008354052**

Facility Type: **Refinery**

Telephone Number: **(310) 212-2800**

Inspected by: Ellen Pates
Environmental Scientist

Date of Inspection: October 13, 2016

Facility Representative: Penny Wirsing, Environmental Section Supervisor
Gregg Stiglic, Environmental Advisor Supervisor

Complaint ID #: 16-1016-0346
16-1016-0347
16-1016-0348
16-1016-0353
16-1016-0400
16-1016-0350

## II. CONSENT

Consent given by (name and title): Penny Wirsing, Environmental Section Supervisor, October 13, 2016

Gregg Stiglic, Environmental Advisor/Supervisor, October 13, 2016



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## IV. NARRATIVE OF OBSERVATIONS/DISCUSSION WITH OPERATOR

Background:

On October 11, 2016 at 5:45 AM Torrance Refinery had a power outage resulting in a flaring event. The refinery flare was visible for an undetermined amount of time until the refinery went back to normal operations. The Department (DTSC) received several complaints re: incident.

On October 13, 2016, I conducted a complaint investigation inspection at Torrance Refining Company. I arrived at the facility at 1:30pm and checked in at the visitor area and received the safety training. Prior to the inspection, I coordinated with Ms. Penny Wirsing for a scheduled time to meet and discussed the flaring incident that happened on the morning of Tuesday, October 11, 2016.

I met with Ms. Wirsing and Mr. Stiglic and asked for consent to obtain information about the flaring incident. They granted their consent to conduct the complaint investigation. According to Ms. Wirsing, they contacted and reported the incident to California Office of Emergency Services (OES). In addition, other agencies such as South Coast Air Quality Management District (SCAQMD), Los Angeles County Public Health Department, Police Department, and the Local Fire Department also responded to the incident. I asked Ms. Wirsing if there were any hazardous waste concerns; she noted there were no hazardous waste concerns, only air emissions. The facility ensured that the Torrance Fire Department and their refinery personnel monitored the air around the perimeter of the refinery for any offsite readings. They also added that they were coordinating with SCAQMD inspector Steve Tsumura. I met Steve Tsumura and Paul Caballero, Air Quality Inspectors, at the time of inspection and exchanged business cards to follow up on compliance.

During my inspection, I observed the flare and Torrance Refinery stated that the flare will continue to burn off until next week. According to Gregg Stiglic, the flare subsided and Torrance Refinery re-started their operations on October 19, 2016. He will submit the "Breakdown Report" to SCAQMD on November 17, 2016, which summarizes the final report.

The Community Relation Managers of Torrance Refinery advised me to direct Public complaints to the Torrance Refinery Hotline at 310-505-3158. They also have a website (www.torrancerefinery.com) with current information and press release that are available for public review.



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I left a Summary of Observations (SOO) and found no hazardous waste violations. I thanked them for their time in assisting me with my complaint investigation.

## V. VIOLATIONS

A Summary of Observations (SOO) was issued on October 13, 2016.

## VI. CONCLUSION

No further investigation required.

## VII. ATTACHMENTS

1. Summary of Observations (SOO)
2. Press Release info

Ellen Pates
Environmental Scientist

Nov. 21, 2016
Date



ED_001593_00025691

# ATTACHMENT 1



ED_001593_00025691

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

# SUMMARY OF OBSERVATIONS

On OCTOBER 13, 2016, the Department of Toxic Substances Control (DTSC), California Environmental Protection Agency, conducted an inspection at:

**Facility Name:** TORRANCE REFINING COMPANY LLC.

**Facility Address:** 3700 W. 190th STREET
TORRANCE, CA. 90504

**EPA ID Number:** CAD008354052 **County:** LOS ANGELES

*Check box below as appropriate*
DTSC will provide you a complete inspection report within 65 days of the date of this inspection.

- [x] As a result of this inspection, no violations of hazardous waste laws, regulations, and requirements were discovered. DTSC greatly appreciates the efforts you have made to comply with the hazardous waste laws and regulations.
- [ ] As a result of this inspection, no violations of hazardous waste laws, regulations, and requirements were discovered. However, DTSC is still reviewing compliance information. Violations may be found after the site visit, and these will be identified in the Violation section of the inspection report.
- [ ] As a result of this inspection the issue(s) listed in Section IV require additional investigation. DTSC will address all unresolved issues in the inspection report. Violations may be found after the site visit, and these will be identified in the Violation section of the inspection report.

| Company Representative Accepting Summary | | DTSC Representative | |
|---|---|---|---|
| **Name:** | Penny Wirsing | **Name:** | ELLEN PATES |
| **Signature:** | Penny Wirsing | **Signature:** | [signature] |
| **Title:** | Env. Section Supervisor | **Title:** | ENVIRONMENTAL SCIENTIST |
| **Date:** | 10/13/16 | **Date:** | OCTOBER 13, 2016 |



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# ATTACHMENT 2



ED_001593_00025691

October 11, 2016 11:44:51 AM PDT

# Regional Power Outage Impacts Refinery - October 11, 2016

At approximately 5:40 a.m. on Tuesday, October 11, a regional power outage that took out power to over 90,000 Southern California Edison (SCE) customers also affected the Torrance Refinery. The refinery was without power for approximately 20 minutes, which resulted in a flaring event.

Plant personnel quickly assessed the situation and are working to stabilize operations. All safety systems at the refinery operated properly and all personnel are safe and accounted for.

The refinery also reported the incident to the South Coast Air Quality Management District and Torrance Fire Department (TFD) and California Office of Emergency Services.

As a precautionary measure, refinery personnel and TFD activated the Del Amo and Crenshaw Barriers to monitor traffic and activated Shelter in Place. Shelter in Place has been lifted. The Del Amo and Crenshaw Barriers have also been lifted. For awareness, Shelter in Place means to stay indoors, shut all windows and doors, turn off air conditioners or all air handling systems, and listen for further instructions.

TFD and refinery personnel are conducting fenceline monitoring, and monitors have detected zero readings.

The flare is a safety device that refineries use to relieve pressure and ensure gases are safely combusted to minimize releases to the atmosphere.

We have begun restarting operations, which will take days, and plan to do so safely with minimal noise and flaring.

Following the last outage, we initiated discussions with SCE about improving their grid to the refinery and will obviously look to accelerate those discussions and action by SCE to provide more reliable electricity to the refinery and the community.

We are able to meet all of our commercial obligations in fuel markets.



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# California Environmental Protection Agency Regulated Site Portal

https://siteportal.calepa.ca.gov

Jim Bohon, Project Sponsor
Retired Assistant Secretary

ED_001593_00025692

# Map Based Viewer

CalEPA

About | Site Portal | Manager

CalEPA Regulated Site Portal

Enter keywords...

Home 233971 sites found

Results | Filter | Export | Legend

## Getting Started

To find the site you're looking for, you can:

### Use the Search Bar above

Enter any identifying information into the search bar above, and both the Results list and the map will populate with any relevant results.

OR

### Manipulate the Map

Focus in on a specific location using the move and zoom tools, and you will see both a visual representation, and items in the Results list, for all sites in the area you specify.

## Additional Help

**Simple Search**

Enter any text into the keyword search, or use the map and/or filters to find sites and environmental interests.

**Filter**

Items listed under the Filter tab limit your search results to the selected items. Filtering is applied in addition to the search string you define in the search box.

**Export**

Use the export function to download data

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# About Tab

CalEPA

About | Site Portal | Manager

**CalEPA Regulated Site Portal**

## Background

The CalEPA Regulated Site Portal is a website that combines data about environmentally regulated sites and facilities in California into a single, searchable database and interactive map. The portal was created to provide a more holistic view of regulated activities statewide. By combining data from a variety of state and federal databases, the portal provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials. (More)

## Data Sources

The portal combines information from the databases listed below. Additional data sources may be added in the future.

CERS - The California Environmental Reporting System was developed by CalEPA to support the reporting of information by regulated businesses and Certified Unified Program Agencies (CUPAs) pertaining to hazardous materials and hazardous waste throughout the state.
EnviroStor - This system is used by the Department of Toxic Substances Control to track permitting, enforcement and cleanup activities at hazardous waste facilities and sites with known or suspected contamination.
GeoTracker - Developed for the State Water Resources Control Board, this database contains information about impacted groundwater sites within the state, such as leaking underground storage tanks, cleanup sites, and permitted facilities such as landfills and operating underground storage tanks facilities.
CIWQS - The California Integrated Water Quality System (CIWQS) was developed by the State Water Board to manage permitting, compliance and enforcement activities related to sites which discharge to surface water (or otherwise affect surface water quality) throughout the state.
*TRI - The Toxics Release Inventory (TRI) is a federal database that contains detailed information on nearly 650 chemicals and chemical categories that over 1,600 industrial and other facilities in the state manage through disposal or other releases, recycling, energy recovery, or treatment. The data are collected from these facilities by the U.S. Environmental Protection Agency*

## Report an Issue or Error

CalEPA and its agencies work together to ensure the information on this website is accurate and up to date. If you believe that you have identified an error or if data appears to be missing, please let us know by following the steps below. We are grateful for your feedback. If you would like a response, please be sure to include your name and phone number or email address.

1. Go to the facility where you first identified the problem.

2. Look at the detail under Regulatory Programs to identify the Source System.

3. Find that Source System contact information below.

4. If you are communicating by email, please include the facility name, a screen shot, or any other information that you believe will help research the problem.

California Environmental Reporting System:
cers@calepa.ca.gov
California Integrated Water Quality System:
1-866-79-CIWQS or ciwqs@waterboards.ca.gov
EnviroStor Cleanup:
1-877-7TOXICS (1-877-786-9427) or envirostor@dtsc.ca.gov
EnviroStor Hazardous Waste:
1-877-7TOXICS (1-877-786-9427) or envirostor@dtsc.ca.gov
GeoTracker:
1-866-480-1028 or geotracker@waterboards.ca.gov
*Toxic Release Inventory:*
*http://www.epa.gov/toxics-release-inventory-tri-program*

### Frequently Asked Questions

## Warehouse Statistics

Show Statistics For: Number of updated sites (30 days)

| | |
|---|---|
| Aboveground Petroleum Storage | 1626 |
| Agriculture Discharge | 68 |
| Animal Wastewater Discharge | 101 |
| Chemical Storage Facilities | 14157 |
| Cleanup Program Site | 159 |
| Corrective Action | 22 |
| Forestry & Silviculture | 135 |
| Hazardous Chemical Management | 373 |
| Hazardous Waste | 42 |
| Hazardous Waste Generator | 9883 |
| Hazardous Waste Onsite Treatment | 225 |
| Household Hazardous Waste Collection | 44 |
| Land Disposal | 49 |
| Land Disposal Site | 25 |
| Leaking Underground Storage Tank Cleanup Site | 303 |
| Military Cleanup Site | 193 |
| Military Privatized Site | 3 |
| Military Underground Storage Tank Site | 71 |
| NPDES Wastewater and Stormwater | 96 |
| RCRA LQ HW Generator | 690 |
| School Cleanup | 1 |
| School Investigation | 7 |
| Sewager Spills | 4 |
| State Response | 26 |
| Tanks & Ground Water Clean Up | 2 |
| Toxic Release Inventory | 53 |
| Underground Storage Tank | 2454 |
| Unregulated | 28 |
| Waste Discharge Requirements | 75 |
| Wetlands - Fill and Dredge Material | 137 |

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# Data Sources

- **CERS:** The California Environmental Reporting System was developed by CalEPA to support the reporting of information by regulated businesses and Certified Unified Program Agencies (CUPAs) pertaining to hazardous materials and hazardous waste throughout the state.
- **EnviroStor:** Developed for DTSC by EcoInteractive, this database contains information pertaining to state and federally listed cleanup sites, along with hazardous waste permitted and corrective action facilities.
- **GeoTracker:** Developed for the Water Board by EcoInteractive, this database contains information pertaining to impacted groundwater sites within the state, such as leaking underground storage tanks, cleanup sites, and permitted facilities such as landfills and operating underground storage tanks facilities.
- **CIWQS:** California Integrated Water Quality System was developed by the Water Board to manage permitting, compliance and enforcement activities related to sites which discharge to surface water (or otherwise affect surface water quality) throughout the state.
- **TRI:** The Toxics Release Inventory is a federal database that contains detailed information on nearly 650 chemicals and chemical categories that over 1,600 industrial and other facilities in the state manage through disposal or other releases, recycling, energy recovery, or treatment. The data are collected from these facilities by USEPA. The collected data is exchanged to CalEPA and updated automatically through the CalEPA exchange node.

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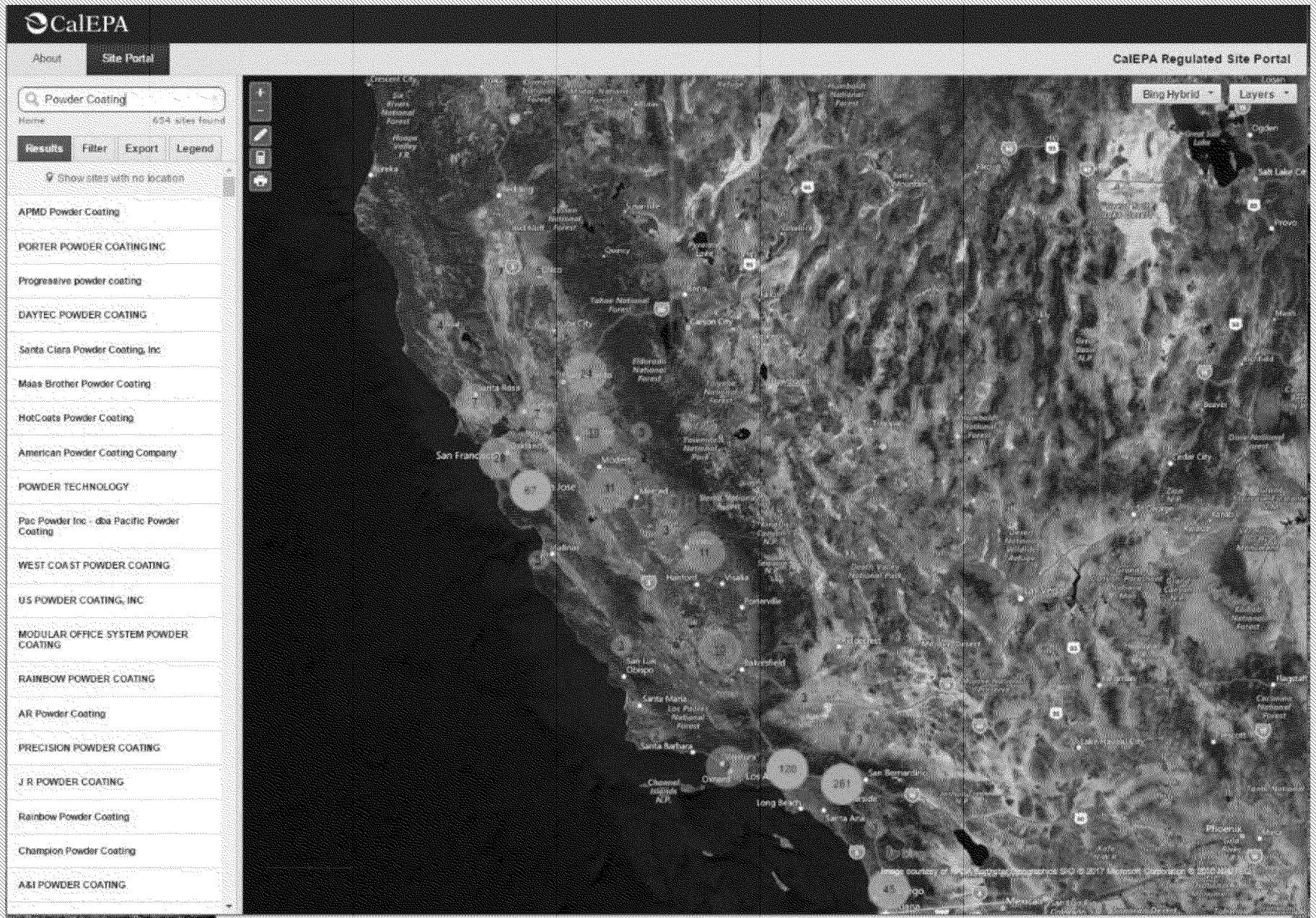
# General Searching




ED_001593_00025692

# Facility Profile View

CalEPA

About | Site Portal | Manager

CalEPA Regulated Site Portal

site_name:"sac cogeneration"

Home 2 sites found

Results | Filter | Export | Legend

- Regulatory Agencies
- Originating Data System
- Regulatory Programs
- Evaluation Type
- Enforcement Type
- Site County
- CUPA Jurisdiction
- Has Violation YN

SAC COGENERATION AUTHORITY II 5000 83RD ST, SACRAMENTO, CA 95826

Profile | Map | Compliance (12) | Chemical Storage (1)

### Alternate IDs

Facilities Explorer ID: 401112
EPA Identifier: CAL000125795
Facility Identifier: FA0008278

### Industry Codes

SIC: 4931 - Electric and other services combined
NAICS: 221112 - Fossil Fuel Electric Power Generation

### Geopolitical Data

County: Sacramento County
CalEnviroscreen 2.0 Percentile Range: 91-95%

### Regulatory Programs

- Aboveground Petroleum Storage
- Hazardous Chemical Management
- Chemical Storage Facilities
- Hazardous Waste Generator

### Affiliates

Filter By: All Regulatory Programs

Operator: Ethos Energy Group — Contact Details

Document Preparer, Environmental Contact, Identification Signer, Primary Emergency Contact: Jeff White — Contact Details

Facility Mailing Address: Mailing Address — Contact Details

Secondary Emergency Contact: Raul Anaya — Contact Details

Parent Corporation: SAC COGENERATION AUTHORITY II — Contact Details

Property Owner: Sacramento Cogen Authority — Contact Details

ED_001593_00025692

# Compliance History

CalEPA

About | Site Portal | Manager

CalEPA Regulated Site Portal

site_name:"sac cogeneration"

Home 2 sites found

Results | Filter | Export | Legend

- Regulatory Agencies
- Originating Data System
- Regulatory Programs
- Evaluation Type
- Enforcement Type
- Site County
- CUPA Jurisdiction
- Has Violation YN

SAC COGENERATION AUTHORITY II 5000 83RD ST, SACRAMENTO, CA 95826 | Profile | Map | Compliance (12) | Chemical Storage (1)

Time Frame: All years | Expand/Collapse All

## Evaluations

**10/22/2014 California Accidental Release Prevention (CalARP) - Compliance Evaluation Inspection**

**Type:** Routine done by local agency

**Notes:** OBSERVATION: Maintenance procedures have been prepared and implemented for the covered process, however, a select number of the maintenance procedures were observed to be vague and lacking detail. RECOMMENDATION: Revise the select number of maintenance procedures identified during the inspection to include added detail.

**11/1/2013 Aboveground Petroleum Storage Act (APSA) - Other/Unknown**

**Type:** Other, not routine, done by local agency

**11/1/2013 Hazardous Materials Release Response Plans (HMRRP) - Compliance Evaluation Inspection**

**11/1/2013 Hazardous Waste Generator - Compliance Evaluation Inspection**

## Violations

**11/1/2013 Hazardous Waste Generator - Failure to maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, or surface water which could threaten huma...**

**Citations:**
- 22 CCR 15 66265.31: California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.31

**Notes:** Returned to compliance on 11/07/2013. OBSERVATION: Spent blast media was observed on the floor under the parts blaster unit in the maintenance shop. Metal fines were observed on the floor around the metal grinding unit in the maintenance shop. Facilities shall be maintained and operated to minimize the possibility of a fire, explosion, or release of hazardous waste to air, soil, or surface water which could threaten human health or the environment. CORRECTIVE ACTION: Submit photos/documentation demonstrating the wastes observed above have been properly removed, characterized, and managed.

**11/1/2013 Hazardous Waste Generator - Failure of the generator to adequately complete, and maintain for review, the following requirements of the source reduction report (SB-14): 1) The name and location of the site, 2) Telephone number, 3) Identification Number, 4) The SIC Code, 5) L...**

**11/1/2013 Hazardous Waste Generator - Failure of the generator to prepare a summary progress report (Form # 1262 titled, "Summary Progress Report" ) and submit it to the Department of Toxic Substances Control every four years thereafter.**

**11/1/2013 Hazardous Materials Release Response Plans (HMRRP) - Failure to complete and/or submit hazardous material inventory forms for all reportable hazardous materials on site.**

**Citations:**
- 19 CCR 4 2729.2(a)(2): California Code of Regulations, Title 19, Chapter 4, Section(s) 2729.2(a)(2)
- HSC 6.95 25504(a): California Health and Safety Code, Chapter 6.95, Section(s) 25504(a)

**Notes:** Returned to compliance on 11/05/2013. OBSERVATION: The business failed to complete and submit chemical inventory forms for gear oil and used stored on site. CORRECTIVE ACTION: The chemical inventory forms were completed and submitted online throught the EMD portal at the time of the inspection. No further action is required.

**11/1/2013 Hazardous Waste Generator - Failure of the generator to prepare a hazardous waste management performance report every four years. The report shall contain sufficient detail to convey an understanding of the hazardous waste management approaches used at the site, using narratives,...**

**11/1/2013 Hazardous Waste Generator - Failure to determine if the waste generated is a hazardous waste and to maintain analysis results for three years.**

## Enforcement Actions

**11/1/2013 Hazardous Materials Release Response Plans (HMRRP) - Notice of Violation**

**Type:** Notice of Violation (Unified Program)

**11/1/2013 Hazardous Waste Generator - Notice of Violation**

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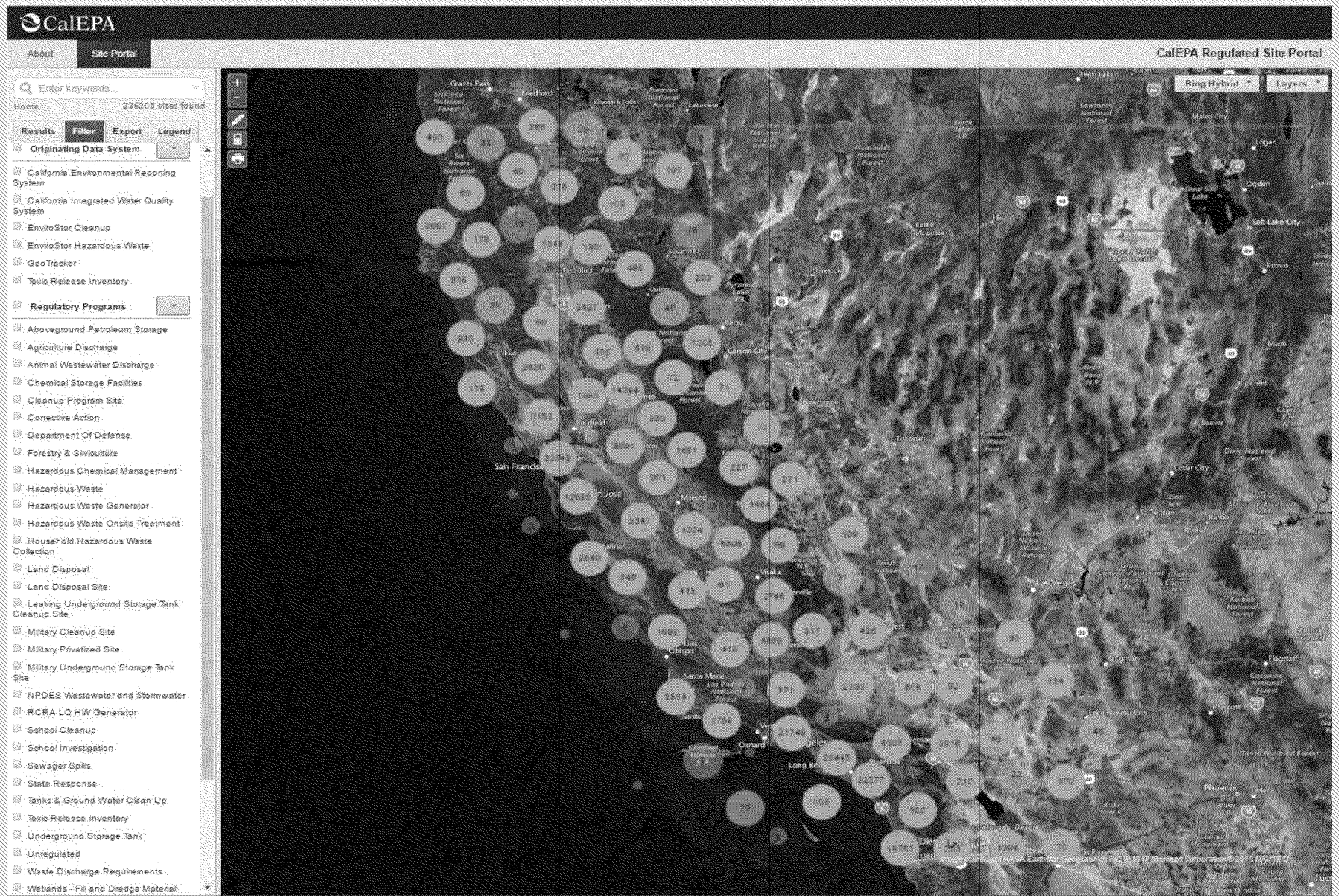
# Filtering Display – Regulatory Programs




ED_001593_00025692

# Filtering Display – Evaluation Types

CalEPA

About | Site Portal

CalEPA Regulated Site Portal

Enter keywords...

Home 203648 sites found

Results | Filter | Export | Legend

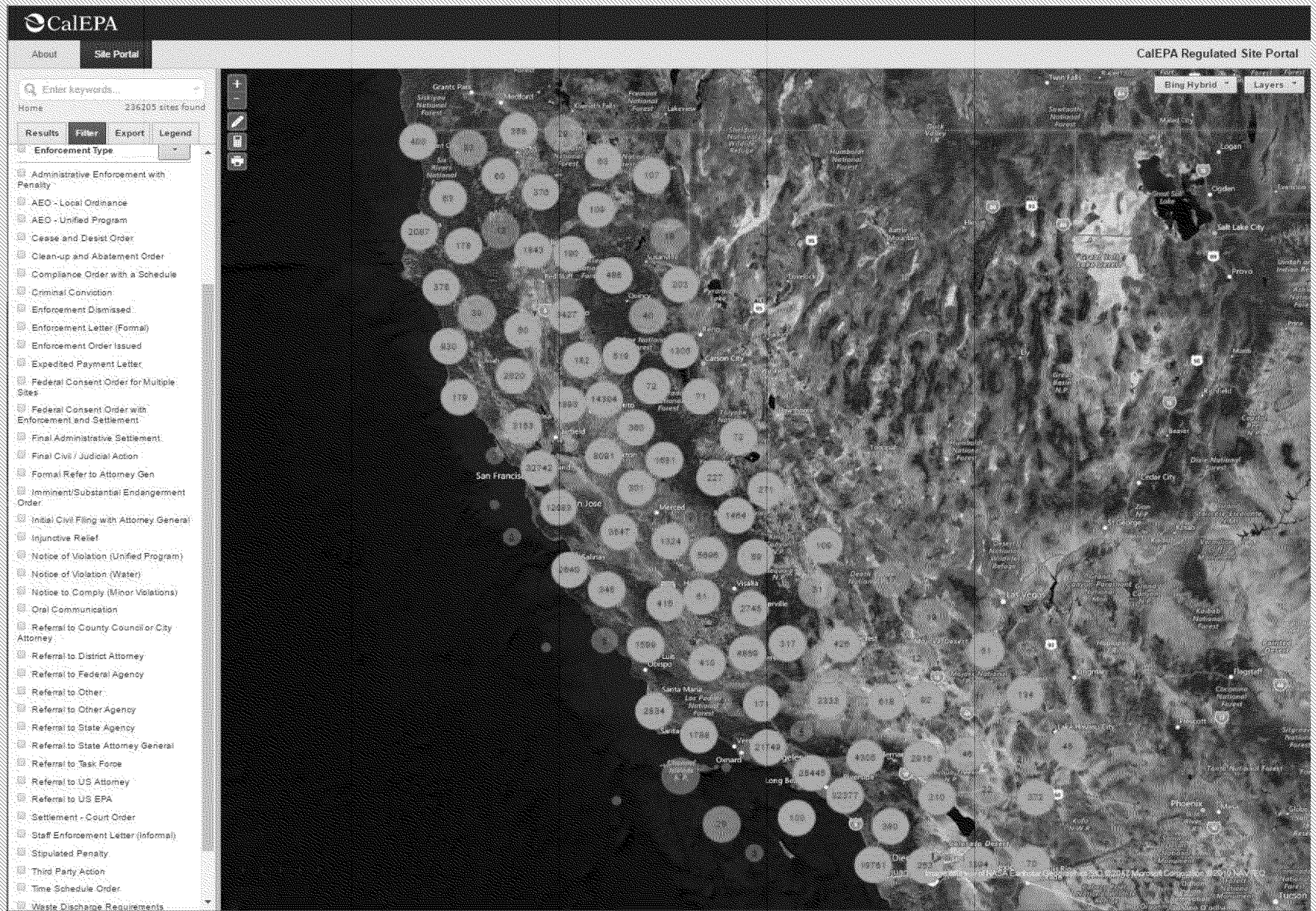
Evaluation Type

- AGT SPCC inspection
- Complaint Inspection
- Compliance
- DTSC Case Development Inspection
- DTSC Compliance Evaluation Inspection
- DTSC Financial Records Review
- DTSC Focused Compliance Inspection
- DTSC Follow-up Inspection
- DTSC Groundwater Monitoring Evaluation
- DTSC Non-financial Record Review
- DTSC Operation and Maintenance Inspection
- Facility Self Disclosure to DTSC
- Field Oversight
- Follow-up inspection (enforcement)
- Follow-up Inspection (noncompliance)
- Miscellaneous Inspection
- Municiple Storm Sewer Audit
- Notice of Termination Inspection
- Other, not routine, done by local agency
- Pre-harvest Inspection
- Pre-project Timber Program Inspection
- Prerequirement inspection
- Pretreatment compliance
- Routine done by local agency
- RWQCB Type A compliance inspection
- RWQCB Type B compliance inspection

Bing Hybrid | Layers

ED_001593_00025692

# Filtering Display – Enforcement Types

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# Dynamic Display

ED_001593_00025692

# Sites Export

Site (3).csv - Excel

| SiteID | SiteName | Address | City | ZIP | Latitude | Longitude |
|---|---|---|---|---|---|---|
| 231423 | SFFD Pumping Station #2 | 3445 VAN NESS AVE | SAN FRANCISCO | 94109 | 37.808104 | -122.426609 |
| 231454 | Chevron Station #9-0107 | 3201 CALIFORNIA STREET | SAN FRANCISCO | 94118 | 37.786963 | -122.44717 |
| 231502 | Circosta Iron & Metal Co. | 1801 EVANS AVE | SAN FRANCISCO | 94124- | 37.745059 | -122.39244 |
| 231554 | Commercial Property | 790 CALIFORNIA ST | SAN FRANCISCO | 94108 | 37.792288 | -122.407404 |
| 231558 | Residential Apartment | 828 JONES ST | SAN FRANCISCO | 94109 | 37.789036 | -122.413385 |
| 231610 | Residential Property | 2091 16TH AVE | SAN FRANCISCO | 94116 | 37.74908 | -122.473221 |
| 231681 | Residential | 401 ROOSEVELT WAY | SAN FRANCISCO | 94114 | 37.764677 | -122.442926 |
| 231778 | Treasure Island NAVSTA - Treasure Island NS SITE F2A AND F2B (5TH STREET) | 5TH STREET | SAN FRANCISCO | 94130 | 37.823362 | -122.365679 |
| 231792 | Residential | 1125 DOLORES STREET | SAN FRANCISCO | 94110 | 37.751374 | -122.424947 |
| 231819 | Presidio of San Francisco - FDS Section BR3-2 | SCHOFIELD ROAD | SAN FRANCISCO | 94129 | 37.800404 | -122.469706 |
| 231858 | Commercial | 1275 BAY ST. | SAN FRANCISCO | 94123 | 37.803499 | -122.42794 |
| 231864 | Residence | 2989 23RD AVE | SAN FRANCISCO | 94132 | 37.732842 | -122.479519 |
| 231865 | WILL'S AUTOMOTIVE | 770 POST STREET | SAN FRANCISCO | 94109 | 37.787569 | -122.414461 |
| 231978 | Loskutoff Property | 2407 HARRISON STREET | SAN FRANCISCO | 94110 | 37.758744 | -122.412168 |
| 231982 | Shell135957 | 551 3RD ST | SAN FRANCISCO | 94107 | 37.752834 | -122.387834 |
| 232023 | Bottarini Service Station | 5400 MISSION STREET | SAN FRANCISCO | 94112 | 37.71361 | -122.44253 |
| 232048 | Chevron Station #9-90985 | 1598 BAY ST | SAN FRANCISCO | 94123 | 37.803371 | -122.433052 |
| 232049 | Residential Apt. | 784 BAY ST | SAN FRANCISCO | 94109 | 37.805029 | -122.419864 |
| 232050 | MULTI RESIDENTIAL/COMMERCIAL PROPERTY | 540 STOCKTON STREET | SAN FRANCISCO | 94108 | 37.791023 | -122.406927 |
| 232238 | Presidio of San Francisco - UST 513.1 | 513A SIMONDS LOOP | SAN FRANCISCO | 94129 | 37.795751 | -122.450189 |
| 232255 | 3RD STREET LIGHT RAIL PROJECT SEG.B | 3RD STREET & 16TH STREET | SAN FRANCISCO | 94103 | 37.766915 | -122.389197 |
| 232299 | Hunters Point NSY - Parcel D-2, AOC D2-A | SPEAR AVENUE | SAN FRANCISCO | 94124 | 37.726177 | -122.368061 |
| 232311 | John O'Connel Tech School | 3200 20TH ST.. | SAN FRANCISCO | 94110 | 37.759137 | -122.412673 |
| 232429 | JACOBSEN PROPERTY | 500 LAGUNA STREET | SAN FRANCISCO | 94102 | 37.775807 | -122.425964 |
| 232470 | W.L. Bipes Co. Inc. | 2040 17TH ST | SAN FRANCISCO | 94103 | 37.764917 | -122.404125 |
| 232608 | Vitlin/Ross Properties | 3131 19TH ST | SAN FRANCISCO | 94110 | 37.760463 | -122.413347 |
| 232661 | Presidio of San Francisco - Presidio of San Francisco- UST 1221.5 | 1221 RALSTON AVENUE | SAN FRANCISCO | 94129 | 37.800771 | -122.473164 |
| 232695 | Shih Yu-Lang Central YMCA | 220 GOLDEN GATE AVE | SAN FRANCISCO | 94102 | 37.781813 | -122.414398 |
| 232748 | APARTMENT PROPERTY | 2061 LYON STREET | SAN FRANCISCO | 94123 | 37.789931 | -122.445916 |
| 232766 | Commercial | 2623 DIVISADERO STREET | SAN FRANCISCO | 94123 | 37.794164 | -122.441827 |
| 232781 | Shell Station #4607 | 300 05TH ST. | SAN FRANCISCO | 94107 | 37.780157 | -122.402265 |
| 232850 | European Motors | 251 11TH ST | SAN FRANCISCO | 94103 | 37.772645 | -122.41366 |
| 232851 | HOA - 2101 Beach St. | 2101 BEACH STREET | SAN FRANCISCO | 94123 | 37.803507 | -122.443859 |
| 232852 | Western Steel and Wire | 1428 EGBERT AVENUE | SAN FRANCISCO | 94124 | 37.723052 | -122.393004 |
| 232853 | Crown Electric | 85 COLUMBIA SQUARE | SAN FRANCISCO | 94103 | 37.777031 | -122.405016 |
| 232861 | O' Neill Inc. | 2090 EVANS AVE | SAN FRANCISCO | 94124 | 37.747874 | -122.395811 |
| 232916 | ESTATE OF PEGGY LIPTON | 1944-1948 GREEN STREET | SAN FRANCISCO | 94123 | 37.796686 | -122.431263 |
| 232917 | Former Gas Station | 3433 03RD ST. | SAN FRANCISCO | 94107- | 37.745798 | -122.386988 |
| 232995 | Chevron Station #9-0087 | 1000 HARRISON STREET | SAN FRANCISCO | 94103 | 37.777277 | -122.404343 |
| 233013 | Hunters Point NSY - Parcel G, AOC 33-A | 0 HUNTERS POINT SHIPYARD | SAN FRANCISCO | 94124 | 37.725447 | -122.366237 |
| 233015 | Presidio of San Francisco - UST 758.2 | 758B PORTOLA STREET | SAN FRANCISCO | 94129 | 37.794323 | -122.454295 |

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# Site Regulated Programs Export

SiteEI (3).csv - Excel

| SiteID | EI_ID | SiteName | Address | City | ZIP | Latitude | Longitude | EI_Description |
|---|---|---|---|---|---|---|---|---|
| 235570 | T0600139186 | Alameda Naval Supply Center Annex - ALAMEDA NAVAL SUPPL | B AVENUE | ALAMEDA | 94501 | 37.78717 | -122.300685 | Military Cleanup Site |
| 235574 | T0607501263 | San Francisco Mart | 1355 MARKET STREET | SAN FRANCISCO | 94103- | 37.776899 | -122.41636 | Leaking Underground Storage Tank Cleanup Site |
| 235616 | T0608100231 | GELCO TRUCK LEASING | 1395 LOWRIE | SOUTH SAN FRANCISCO | 94080 | 37.646558 | -122.409869 | Leaking Underground Storage Tank Cleanup Site |
| 235618 | T0608100941 | BRISBANE CORP YARD | 3795 BAYSHORE | BRISBANE | 94005 | 37.67662 | -122.391686 | Leaking Underground Storage Tank Cleanup Site |
| 235664 | T0600101073 | PETSAS, MARY | 16035 14TH | SAN LEANDRO | 94578 | 37.697965 | -122.118609 | Leaking Underground Storage Tank Cleanup Site |
| 23567 | 10064797 | D & J AUTO BODY | 7232 MISSION ST | DALY CITY | 94014 | 37.692795 | -122.46543 | Chemical Storage Facilities |
| 23567 | 10064797 | D & J AUTO BODY | 7232 MISSION ST | DALY CITY | 94014 | 37.692795 | -122.46543 | Hazardous Waste Generator |
| 235678 | T0601348800 | US Army MOTCO (formerly Concord NWS Tidal Sites) - CONCOR | MEREEN ST. | CONCORD | 94520 | 38.045556 | -122.019267 | Military Underground Storage Tank Site |
| 235692 | T0608100478 | SHELL | 3999 SKYLINE | SAN BRUNO | 94066 | 37.638744 | -122.464077 | Leaking Underground Storage Tank Cleanup Site |
| 235708 | SL18335755 | BOHANNA & PEARCE | 30460 WHIPPLE ROAD | UNION CITY | 94587 | 37.600608 | -122.086812 | Cleanup Program Site |
| 23572 | 10484665 | D & K Service Tire & Repair | 2210 SAN RAMON VALLEY BLVD STE B | SAN RAMON | 94583 | 37.78155 | -121.97835 | Chemical Storage Facilities |
| 23572 | 10484665 | D & K Service Tire & Repair | 2210 SAN RAMON VALLEY BLVD STE B | SAN RAMON | 94583 | 37.78155 | -121.97835 | Hazardous Waste Generator |
| 23572 | 10484665 | D & K Service Tire & Repair | 2210 SAN RAMON VALLEY BLVD STE B | SAN RAMON | 94583 | 37.78155 | -121.97835 | Hazardous Waste Onsite Treatment |
| 235741 | T0600100806 | | 3440 ENTERPRISE AVE | HAYWARD | 94545 | 37.632246 | -122.124996 | Leaking Underground Storage Tank Cleanup Site |
| 235744 | T0608191585 | DELUXE PACKAGES | 205 SHAW RD | SOUTH SAN FRANCISCO | 94089 | 37.641704 | -122.410574 | Cleanup Program Site |
| 235747 | T0600100985 | OAKLAND AUTO PARTS | 706 HARRISON | OAKLAND | 94607 | 37.798196 | -122.270396 | Leaking Underground Storage Tank Cleanup Site |
| 235750 | 80001815 | LIQUID GOLD OIL CORP | HOFFMAN BLVD & S 47TH ST | RICHMOND | 948040000 | 37.909567 | -122.323665 | Corrective Action |
| 235750 | CAT000646208 | LIQUID GOLD OIL CORP | HOFFMAN BLVD & S 47TH ST | RICHMOND | 948040000 | 37.909567 | -122.323665 | Hazardous Waste |
| 235769 | T0608100018 | AMERICAN ROCK & ASPHALT | 1 OLD QUARRY ROAD | BRISBANE | 94005 | 37.687272 | -122.419506 | Leaking Underground Storage Tank Cleanup Site |
| 235770 | T0608126439 | OLYMPIAN PRODUCE MKT CARD LOCK | 131 TERMINAL | SOUTH SAN FRANCISCO | 94080 | 37.645819 | -122.407863 | Leaking Underground Storage Tank Cleanup Site |
| 235772 | T060139000 | TOSCO SERVICE STATION | 4190 TREAT | CONCORD | 94518 | 37.954959 | -122.001693 | Leaking Underground Storage Tank Cleanup Site |
| 235782 | T10000000651 | Port of Oakland, Airport Division | 530 WATER STREET | OAKLAND | 94607 | 37.795644 | -122.278841 | Cleanup Program Site |
| 235789 | T0609592453 | Mare Island NSY (Vallejo) - Mare Island Nav Ship A202 | PRESTON AVE WEST OF MESA RD | VALLEJO | 94592 | 38.086141 | -122.272185 | Military Underground Storage Tank Site |
| 235795 | L10005405301 | N. PRT. OF OAK. DISPOSAL SITE | HARBOR BAY PRKWY AND DOOLITTLE | OAKLAND | 94621 | 37.745247 | -122.22661 | Land Disposal Site |
| 2358 | 10480900 | A. Bauer Repair, Inc. | 601 BRUSH ST STE B | OAKLAND | 94607 | 37.80201 | -122.28204 | Chemical Storage Facilities |
| 2358 | 10480900 | A. Bauer Repair, Inc. | 601 BRUSH ST STE B | OAKLAND | 94607 | 37.80201 | -122.28204 | Hazardous Waste Generator |
| 235817 | T0600100009 | A & H STEEL | 1000 WHIPPLE ROAD | UNION CITY | 94587 | 37.605154 | -122.035622 | Leaking Underground Storage Tank Cleanup Site |
| 235818 | T0600100836 | LINCOLN PROPERTIES | 1345 DOOLITTLE | SAN LEANDRO | 94577 | 37.713924 | -122.18785 | Leaking Underground Storage Tank Cleanup Site |
| 235827 | CAD000094243 | CRITERION CATALYSTS & TECHNOLOGIES LP | 2840 WILLOW PASS ROAD | BAY POINT | 945653294 | 38.026866 | -121.944648 | Hazardous Waste |
| 235841 | T0609515915 | ROADRUNNER GAS | 990 REDWOOD | VALLEJO | 94590 | 38.123027 | -122.252332 | Leaking Underground Storage Tank Cleanup Site |
| 235859 | T06019724386 | CANTERBURY RESIDENTIAL DEVELOP | 777 B | HAYWARD | 94541 | 37.671367 | -122.085556 | Cleanup Program Site |
| 235866 | T10000002913 | Lennar Mare Island - Fuel-oil Pipeline (FOPL) Segment G1/10/7 | 7TH STREET AND WATERFRONT AVENUE | VALLEJO | 94592 | 38.10157 | -122.270643 | Military Privatized Site |
| 23587 | 10406323 | D & S BODY SHOP | 38 BETA CT SUITE A-3 | SAN RAMON | 94583 | 37.78116 | -121.98279 | Chemical Storage Facilities |
| 23587 | 10406323 | D & S BODY SHOP | 38 BETA CT SUITE A-3 | SAN RAMON | 94583 | 37.78116 | -121.98279 | Hazardous Waste Generator |
| 235877 | T0607538935 | Best Buy Company, Inc. | 1717 HARRISON STREET | SAN FRANCISCO | 94103 | 37.768705 | -122.412978 | Leaking Underground Storage Tank Cleanup Site |
| 235887 | T0600102154 | ABE PETROLEUM | 17715 MISSION BLVD | HAYWARD | 94544 | 37.688339 | -122.104821 | Leaking Underground Storage Tank Cleanup Site |
| 235898 | T0607500187 | Vacant Lot-Moont. Tower Assoc. | 642 COMMERICAL STREET | SAN FRANCISCO | 94111 | 37.794309 | -122.402688 | Leaking Underground Storage Tank Cleanup Site |
| 235917 | T0607501361 | Single Residence | 40 DORANTES AVE | SAN FRANCISCO | 94116 | 37.746214 | -122.463066 | Leaking Underground Storage Tank Cleanup Site |
| 235919 | T0608100313 | LUCCA PACKING CORP. | 360 HARBOR | SOUTH SAN FRANCISCO | 94080 | 37.643724 | -122.399295 | Leaking Underground Storage Tank Cleanup Site |
| 235927 | T0600100211 | MOBIL 10-L3G/BP 11119 | 31300 ALVARADO NILES ROAD | UNION CITY | 94587 | 37.598432 | -122.066173 | Leaking Underground Storage Tank Cleanup Site |
| 235950 | T0604100308 | NOVATO FORD | 6995 REDWOOD BLVD | NOVATO | 94947 | 38.096229 | -122.564457 | Leaking Underground Storage Tank Cleanup Site |

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# Compliance Enforcements Export

EA.csv - Excel

| | SiteID | SiteName | SiteAddress | City | ZipCode | EnfActionDate | EnfActionType | EnfActionDescription | EnfActionNotes | EnfActionDivision | EnfAction Program | EnfActionSource |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 12446 | BIOFUEL OASIS COOPERATIVE, INC. | 1441 ASHBY AVE | BERKELEY | 94702 | 11/9/2015 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 3 | 124710 | IRONIES, INC. | 2222 FIFTH ST | BERKELEY | 94710 | 11/15/2013 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 4 | 124710 | IRONIES, INC. | 2222 FIFTH ST | BERKELEY | 94710 | 11/15/2013 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HW | CERS |
| 5 | 124710 | IRONIES, INC. | 2222 FIFTH ST | BERKELEY | 94710 | 11/22/2013 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HW | CERS |
| 6 | 124710 | IRONIES, INC. | 2222 FIFTH ST | BERKELEY | 94710 | 11/27/2013 | AEO - Unified Program | Administrative Enforcement Order Based on the Unified Program Statute | Fines/Penalties Assessed: $5,000.00. Settlement meeting conducted with Michael Schneider on 12/10/13. Consent order mailed 12/11/13. Notice of Defense submitted 12/17/13. Settlement Meeting held 2/11/14 and agreement reached. | Berkeley City Toxics Management Division | HW | CERS |
| 7 | 125973 | JETCO MOTORS | 2120 FIFTH ST | BERKELEY | 94710 | 3/18/2014 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 8 | 126362 | JOE'S TIRES | 1865 UNIVERSITY AVE | BERKELEY | 94710 | 7/8/2015 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 9 | 126362 | JOE'S TIRES | 1865 UNIVERSITY AVE | BERKELEY | 94710 | 7/8/2015 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HW | CERS |
| 10 | 127952 | KING POOL | 1700 HOPKINS ST | BERKELEY | 94703 | 3/18/2014 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 11 | 127952 | KING POOL | 1700 HOPKINS ST | BERKELEY | 94703 | 11/25/2013 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 12 | 128451 | KURTZ, RUSTA & RANGCHI | 1313 GILMAN ST STE A | BERKELEY | 94706 | 10/14/2014 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HMRRP | CERS |
| 13 | 130654 | LIBBY LABORATORIES, INC. | 1700 SIXTH ST | BERKELEY | 94710 | 8/18/2014 | Notice of Violation (Unified Program) | Notice of Violation Issued by the Inspector at the Time of Inspection | | Berkeley City Toxics Management Division | HW | CERS |
| | | | | | | | Notice of Violation | Notice of Violation Issued by the Inspector at the Time of | | Berkeley City Toxics | | |

# Compliance Enforcements Export

EA (1).csv - Excel

| SiteID | SiteName | SiteAddress | City | ZipCode | EnfActionDate | EnfActionType | EnfActionDescription | EnfActionNotes | EnfActionDivision | EnfActionProgram | EnfActionSource |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 147782 | Richmond Refinery | 841 CHEVRON | RICHMOND | 94801 | 2/5/2009 | Administrative Enforcement with Penality | Administrative Enforcement with Civil Liability (Penality) | | Water Boards | NPDINDLRG | CIWQS |
| 147782 | Richmond Refinery | 841 CHEVRON | RICHMOND | 94801 | 2/21/2014 | Administrative Enforcement with Penality | Administrative Enforcement with Civil Liability (Penality) | | Water Boards | NPDINDLRG | CIWQS |
| 147782 | Richmond Refinery | 841 CHEVRON | RICHMOND | 94801 | 6/19/2000 | Oral Communication | Oral Communication | | Water Boards | NPDINDLRG | CIWQS |
| 147782 | Richmond Refinery | 841 CHEVRON | RICHMOND | 94801 | 9/13/1995 | Administrative Enforcement with Penality | Administrative Enforcement with Civil Liability (Penality) | | Water Boards | NPDINDLRG | CIWQS |
| 147782 | Richmond Refinery | 841 CHEVRON | RICHMOND | 94801 | 12/16/2005 | Administrative Enforcement with Penality | Administrative Enforcement with Civil Liability (Penality) | | Water Boards | NPDINDLRG | CIWQS |
| 148542 | Robert Moniz Dairy | 12770 SCHULTE | TRACY | 95377 | 8/29/2014 | Notice of Violation (Water) | Notice of Violation Letter (Informal) | | Water Boards | ANIWSTCOWS | CIWQS |
| 148542 | Robert Moniz Dairy | 12770 SCHULTE | TRACY | 95377 | 11/30/2012 | Notice of Violation (Water) | Notice of Violation Letter (Informal) | | Water Boards | ANIWSTCOWS | CIWQS |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 2/11/2010 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 3/7/2002 | Final Administrative Settlement | Final Administrative Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 6/5/2006 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 6/12/2009 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 6/24/2008 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 7/21/2011 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 10/5/2010 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 12/13/2001 | Enforcement Order Issued | Enforcement Order Issued | | Department of Toxic | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 12/17/2012 | Federal Consent Order with Enforcement and Settlement | Federal Consent Order with Enforcement and Settlement | | Department of Toxic Substances Control | DTSC_ENF | ENVSTORHAZ |
| 149924 | Safety-Kleen of California, Inc. | 6880 SMITH AVE | NEWARK | 94560 | 12/18/2000 | Final Civil / Judicial Action | Final Civil / Judicial Action | | Department of Toxic | DTSC_ENF | ENVSTORHAZ |
| 150184 | Salvador Dairy (Reeve Rd) | 20711 REEVE | TRACY | 95304 | 1/12/2012 | Administrative Enforcement with Penality | Administrative Enforcement with Civil Liability (Penality) | | Water Boards | ANIWSTCOWS | CIWQS |
| 150184 | Salvador Dairy (Reeve Rd) | 20711 REEVE | TRACY | 95304 | 8/25/2011 | Notice of Violation (Water) | Notice of Violation Letter (Informal) | | Water Boards | ANIWSTCOWS | CIWQS |
| 150184 | Salvador Dairy (Reeve Rd) | 20711 REEVE | TRACY | 95304 | 9/2/2010 | Notice of Violation (Water) | Notice of Violation Letter (Informal) | | Water Boards | ANIWSTCOWS | CIWQS |

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# Multiple Regulatory Programs

CalEPA

About | Site Portal | Manager

CalEPA Regulated Site Portal

site_name:"carlmont"

Home 2 sites found

Results | Filter | Export | Legend

- Regulatory Agencies
- Originating Data System
- Regulatory Programs
- Evaluation Type
- Enforcement Type
- Site County
- CUPA Jurisdiction
- Has Violation YN

CARLMONT HIGH SCHOOL 1400 ALAMEDA DE LAS PULGAS, BELMONT, CA 94002

Profile | Map | Compliance (5) | Chemical Storage (5)

**Alternate IDs**

**APN:** 045-071-020
**APN:** 045071020
**Facilities Explorer ID:** 179873
**Regional Water Board Case Number:** 41-0112
**Local Agency Case Number:** 770020
**EPA Identifier:** CAD981964927
**Facility Identifier:** FA0055774

**Industry Codes**

**NAICS:** 611110 - Elementary and Secondary Schools

## Geopolitical Data

**County:** San Mateo County
**CalEnviroscreen 2.0 Percentile Range:** 11-15%

## Regulatory Programs

- Leaking Underground Storage Tank Cleanup Site
- School Investigation
- Hazardous Waste Generator
- Chemical Storage Facilities

## Affiliates

**Filter By:** All Regulatory Programs

**Parent Corporation:** CARLMONT HIGH SCHOOL — Contact Details

**Lead Project Manager:** HAROLD (BUD) DUKE — Contact Details

**Local Agency Caseworker:** JACOB MADDEN - SAN MATEO COUNTY LOP — Contact Details

**Document Preparer, Environmental Contact, Identification Signer, Primary Emergency Contact:** Jerome Harris — Contact Details

**Supervisor:** JUAN KOPONEN — Contact Details

**Facility Mailing Address:** Mailing Address — Contact Details

**Regional Board Caseworker:** Regional Water Board - SAN FRANCISCO BAY RWQCB (REGION 2) — Contact Details

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# Live Link to Source System

STATE WATER RESOURCES CONTROL BOARD
GEOTRACKER

Tools | Reports | UST Case Closures | Information

## CARLMONT HIGH SCHOOL (T0608100106) - (MAP)

SIGN UP FOR EMAIL ALERTS

1400 ALAMEDA DE LAS PULGAS
BELMONT, CA 94002
SAN MATEO COUNTY
*LUST CLEANUP SITE*
PRINTABLE CASE SUMMARY / CSM REPORT

CLEANUP OVERSIGHT AGENCIES
SAN MATEO COUNTY LOP *(LEAD)* - *CASE #: 770020*
*CASEWORKER: JACOB MADDEN*
SAN FRANCISCO BAY RWQCB (REGION 2) - *CASE #: 41-0112*
*CASEWORKER: Regional Water Board*

Summary | Cleanup Action Report | Regulatory Activities | *Environmental Data (ESI)* | *Site Maps / Documents* | *Community Involvement* | *Related Cases*

### Regulatory Profile

PRINTABLE CASE SUMMARY

CLEANUP STATUS - DEFINITIONS
COMPLETED - CASE CLOSED AS OF 1/28/2000 - CLEANUP STATUS HISTORY

POTENTIAL CONTAMINANTS OF CONCERN
GASOLINE

POTENTIAL MEDIA OF CONCERN
OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)

FILE LOCATION
LOCAL AGENCY WAREHOUSE

USER DEFINED BENEFICIAL USE
GW - GROUNDWATER RECHARGE

DESIGNATED BENEFICIAL USE(S) - DEFINITIONS
MUN

DWR GROUNDWATER SUB-BASIN NAME
Santa Clara Valley - San Mateo Plain (2-9.03)

CALWATER WATERSHED NAME
South Bay - San Mateo Bayside (204.40)

### Site History

No site history available

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# Live Link to Source System

CalEPA Regulated Site P | Envirostor | GeoTracker

www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=60001056

Apps | CalOES | Emergency Response | CalEPA Regulated Site | Unified Program | Cal-CUPA | CalEPA Home | CPR Classical | Classical KUSC | Google Maps | KDFC SF | Pandora

DEPARTMENT OF TOXIC SUBSTANCES CONTROL

CA.GOV ENVIROSTOR

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## CARLMONT HIGH SCHOOL MUSIC BUILDING (60001056)

SIGN UP FOR EMAIL ALERTS

1400 ALAMEDA DE LAS PULGAS
BELMONT, CA 94002
SAN MATEO COUNTY
**SITE TYPE:** SCHOOL

**PROJECT MANAGER:** HAROLD (BUD) DUKE
**SUPERVISOR:** JUAN KOPONEN
**OFFICE:** NORTHERN CALIFORNIA SCHOOLS & SANTA SUSANA
**SCHOOL DISTRICT:** SEQUOIA UNION HIGH SCHOOL DISTRICT

Summary | Activities | Map | Related Sites

### Site Information

**CLEANUP STATUS**
INACTIVE - ACTION REQUIRED AS OF 10/6/2010

**SITE TYPE:** SCHOOL
**NATIONAL PRIORITIES LIST:** NO
**ACRES:** 1.74 ACRES
**APN:** 045-071-020, 045071020
**CLEANUP OVERSIGHT AGENCIES:**
DTSC - SITE CLEANUP PROGRAM - LEAD

**SCHOOL DISTRICT:** SEQUOIA UNION HIGH SCHOOL DISTRICT
**ENVIROSTOR ID:** 60001056
**SITE CODE:** 204230
**SPECIAL PROGRAM:**
**FUNDING:** SCHOOL DISTRICT
**ASSEMBLY DISTRICT:** 22
**SENATE DISTRICT:** 13

### Regulatory Profile

**PAST USE(S) THAT CAUSED CONTAMINATION**
SCHOOL - HIGH SCHOOL

**POTENTIAL CONTAMINANTS OF CONCERN**
CHLORDANE
DDT
UNDER INVESTIGATION
NATURALLY OCCURRING ASBESTOS (NOA)

**POTENTIAL MEDIA AFFECTED**
UNDER INVESTIGATION

### Site History

The district is planning to construct a new music and art building at the location of the current music building, which is scheduled for demolition. The new building will be an approximate 7,600 square foot three story building. It will be located on the west side of the newly constructed performing arts building.

During the review of the Phase I, the District contacted DTSC with plans to demolish the building, prior to the completion of the Phase I review by DTSC. The DTSC Project Manager advised the consultant on sampling requirements before and after building demolishions. The District elected to conduct limited sampling under a Phase I Addendum, prior to DTSC's review of the Phase I.

Following receipt of the Phase I Addendum Data, DTSC contacted the District to notify them that, although the Phase I addendum addressed concerns for OCPs and lead around the building, a PEA would be required for potential Naturally Occurring Asbestos. On April 7, 2009, the District elected to withdraw from the DTSC process, forego the PEA for NOA, and drop the project.

In September of 2009, the District decided to re-open the project, and entered into an EOA with DTSC on September 16, 2009. DTSC agreed to use geotech boring samples along with one additional location for NOA analysis.

On March 3, 2010, the District requested DTSC to drop the site as it decided not to pursue State funds for the project. Consequently, DTSC issued a Inactive Status letter on March 4, 2010, and closed the project as Inactive - Action Required.

A CRU was mailed on 9/29/10

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# Information Security Issues

Worked With:

- Department of Homeland Security
  - Critical Infrastructure Directorate
  - Chemical Facility Anti-Terrorism Standards (CFATS)
- CalOES Infrastructure Protection
- Chemical Industry Council of California
- Dow Chemical
- AT&T
- CCEEB
- California Cable & Telecommunications Association
- Metropolitan Water District of Southern California

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# Live Demo

https://siteportal.calepa.ca.gov

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Department of Toxic Substances Control
Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

# SUMMARY OF OBSERVATIONS

On OCTOBER 13, 2016, the Department of Toxic Substances Control (DTSC), California Environmental Protection Agency, conducted an inspection at:

**Facility Name:** TORRANCE REFINING COMPANY LLC.

**Facility Address:** 3700 W. 190th STREET
TORRANCE, CA. 90504

**EPA ID Number:** CAD008354052 **County:** LOS ANGELES

*Check box below as appropriate*
DTSC will provide you a complete inspection report within 65 days of the date of this inspection.

☑ As a result of this inspection, no violations of hazardous waste laws, regulations, and requirements were discovered. DTSC greatly appreciates the efforts you have made to comply with the hazardous waste laws and regulations.

☐ As a result of this inspection, no violations of hazardous waste laws, regulations, and requirements were discovered. However, DTSC is still reviewing compliance information. Violations may be found after the site visit, and these will be identified in the Violation section of the inspection report.

☐ As a result of this inspection the issue(s) listed in Section IV require additional investigation. DTSC will address all unresolved issues in the inspection report. Violations may be found after the site visit, and these will be identified in the Violation section of the inspection report.

| Company Representative Accepting Summary | | DTSC Representative | |
|---|---|---|---|
| **Name:** | Penny Wirsing | **Name:** | ELLEN PATES |
| **Signature:** | Penny Wirsing | **Signature:** | [signature] |
| **Title:** | Env. Section Supervisor | **Title:** | ENVIRONMENTAL SCIENTIST |
| **Date:** | 10/13/16 | **Date:** | OCTOBER 13, 2016 |



ED_001593_00025693

**To:** Tai, Lung-yin@DTSC[Lung-yin.Tai@dtsc.ca.gov]; Choe, Michael@DTSC[Michael.Choe@dtsc.ca.gov]
**Cc:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]; Wicher, Frances[Wicher.Frances@epa.gov]
**From:** Gross, Barbara
**Sent:** Tue 3/22/2016 4:13:57 PM
**Subject:** RE: US EPA Review on Draft Permit for Chevron Landfarms
EPA Comments to DTSC Chevron Landfarm draft permit final.docx

Hello Lewis Tai -

Thank you for giving us the opportunity to review and comment on the proposed permit decision for the draft Chevron Landfarm post-closure permit. Staff from the Permits Section and the Enforcement Division performed a general review. Our discussion includes general comments with suggestions to help clarify overall permit issues, and more specific comments aimed to help clarify and increase enforceability of the permit.

Please keep in mind that our review of the permit application was limited and did not include determining completeness or technical adequacy. Our review is not intended to be as thorough as the process DTSC completed as the permitting authority.

If you have any questions about our comments please contact Frances Wicher at 415-972-3957 . If you have questions about our process, please call me at 415-972-3972.

Barbara

BARBARA GROSS ..... Manager, Permits Section ..... USEPA Region 9, Land Division ..... 415.972.3972

**From:** Tai, Lung-yin@DTSC [mailto:Lung-yin.Tai@dtsc.ca.gov]
**Sent:** Monday, February 22, 2016 2:57 PM
**To:** Gross, Barbara <Gross.Barbara@epa.gov>
**Cc:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>; Choe, Michael@DTSC <Michael.Choe@dtsc.ca.gov>
**Subject:** US EPA Review on Draft Permit for Chevron Landfarms

Dear Ms. Gross,

Chevron Landfarms Post-Closure (Richmond) has their Permit Renewal Application from this office. I have completed the supervisory review, and come to the stage for our Legal Office to review. I also have our Public Participation to start a Public Comment Period from 3/31/16 to 5/17/16. We have learned that US EPA would like to review it before the Public Comment Period. I am sending this Draft Permit for your review. Would it be okay to have your comments back in three weeks (3/14) or less? In case of any question, please contact me at the phone as shown. Thank you.

***Lung-Yin (Lewis) Tai***

***California Environmental Protection Agency***

***Department of Toxic Substances Control***

***Office of Permitting***

***8800 Cal Center Drive***

***Sacramento, CA 95826***

***Direct: (916) 255-3615***

# EPA Comments on the Draft Post-Closure Permit for the Chevron Richmond Refinery Landfarms 1-5

March 21, 2016

EPA received the draft post-closure permit for the Chevron Richmond Refinery Landfarms 1-5 on February 22, 2016. Thank you for giving us the opportunity to review and comment on the proposed permit decision. EPA has performed a general review of the draft Permit and provides the following observations, questions, and comments to DTSC. Please note that we did not perform a detailed review of all aspects of the draft Permit and its supporting documents.

**General Comments** - the following comments are intended to clarify overall permit issues.

We recommend that the draft permit identify what changes (revisions/additions/deletions) are being made to the 2003 permit.

The post closure permit covers a small portion of the RCRA actions that apply to the Chevron Richmond Refinery. We recommend including a discussion of how this post-closure permit fits in to the overall requirements of Chevron and its regulating community. It would be helpful to see the context to avoid the impression that this is the only permit at the refinery.

The draft permit renewal relies on other documents, such as Water Board's orders, for key requirements (e.g., groundwater monitoring and remediation, identification of constituents of concern, semi-annual reporting). For clarity and enforceability, we suggest that when possible, references to other documents are to specific sections/pages in the document rather than to the document as a whole. We also suggest that key documents be appended to the final permit renewal.

Are there continuing requirements for bioremediation of the VOCs in the landfarms? If so, they should be described in the permit along with any requirements for monitoring progress of the bioremediation.

The draft permit mentions that the soils and groundwater below the landfarms are impacted by metals (chromium, lead, nickel, vanadium). If they are mentioned in the permit as being present in the landfarms, they should be better addressed. If the Water Board is responsible, it should be noted.

**Specific Comments** – the following comments are intended to illustrate areas that could increase the enforceability of the permit and clarify vague and inconsistent terms.

<u>Definition and Use of the term "Facility"</u>: The definition of "facility" in Part I seems to encompass the entire Chevron Richmond Refinery while the term as used in the rest of the draft permit clearly means only Landfarms 1-5. We suggested that the definition in Part I be revised to limit it to just the portion of the Chevron Richmond Refinery addressed by this post-closure permit renewal.

<u>Conditions III.4.</u> A number of conditions state that the specific element is either in or described in Appendix K "Revised Landfarms Post-Closure Monitoring Plan" of the Approved Application. In most cases, Appendix K does not contain this information. For example, Condition III.4.c. states that constituents of concern are described in Appendix K and Condition III.4.d. states that concentration limits for the facility are in Appendix K; however, the appendix contains no list of COC nor any concentration limits.



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Part IV. Waste Types/RCRA Hazardous Waste Codes: For Landfarm Unit 1, several types of waste are listed under "Waste Types" but are not included in the list of RCRA Hazardous Waste Codes (e.g., leaded tank bottoms, waste code K052). We suggest checking that the Waste Types/RCRA Hazardous Waste Codes are consistent for each permitted unit.

Conditions V.1., V.3, and V.4.: Annual inspections for the vegetative soil covers and surface drainage system are to occur "prior to the start of the rainy season", "prior to the onset of the rainy season," or "before the beginning of the rainy season", respectively. Neither the draft permit nor the "Revised Landfarms Post-Closure Monitoring Plan" define what is the start/onset/beginning of the rainy season. We suggest that the permit include this definition and that the same phrasing be used consistently.

Condition V.1.: It is not clear what is meant by the "integrity of the final vegetative cover." If there are specific criteria that the Permittee needs to meet for demonstrating adequacy of the vegetative cover (e.g., prevention of windblown dust), they should be included in this permit condition.

This condition refers to the Semi-Annual Landfarms Status Report. This report does not seem to be described by title in Appendix K. Is it the report discussed in section 3 of Appendix K? Is it a report required by the Water Board's orders? We suggest that the report and its required contents be described in more detail. Also, if inspections of the vegetative and soil covers and surface drainage are only required annually, is semi-annual reporting needed?

Condition V.3. This condition should include a requirement that the results of the monitoring and any necessary repairs be documented in the Semi-Annual Landfarms Status Report.

This condition requires the soil cover be inspected after "major rainfall events." This term should be defined in the permit.

Condition V.4. Are the drainage swales and culverts part of the drainage control system and therefore will be inspected annually? If not, the permit should include a requirement that they be inspected at least annually.

This condition should include a requirement that the results of the monitoring and any necessary repairs be documented in the Semi-Annual Landfarms Status Report.

This condition requires that additional inspections of the surface drainage pumps be conducted after "heavy rainfall." Is this the same as a "major rainfall event"? If so, the same term should be used in both this condition and condition V.3. If not, "Heavy rainfall" should be defined.

Part V. We recommend DTSC add a specific permit condition indicating which facility conditions require written Notifications to DTSC. For example: "The Permittee shall notify DTSC in writing for the following conditions or events:

> a. Immediately by calling DTSC, followed in writing within 24 hours of any violation of a permit condition as discovered by facility personnel during routine operations of the facility.
>
> b. Within 24 hours following an earthquake of magnitude 5 or greater, verbally report the results of inspections to DTSC. A written report which includes the information listed in the approved "Revised Landfarms Post-Earthquake Inspection and Corrective Action Plan" shall be submitted to DTSC within 15 days of the incident.

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**Cc:** Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]; Gross, Barbara[Gross.Barbara@epa.gov]; Rajagopalan, Latha[Rajagopalan.Latha@epa.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Tue 7/12/2016 2:31:20 PM
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

I am planning to public notice it sometimes in early August. How much time do you need?

**From:** Zabaneh, Mahfouz [mailto:Zabaneh.Mahfouz@epa.gov]
**Sent:** Monday, July 11, 2016 4:28 PM
**To:** Eshaghian, Mike@DTSC
**Cc:** Blum, Phil@DTSC; Gross, Barbara; Rajagopalan, Latha
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mike,

I will pass this permit to my Supervisor, Barbara Gross, and she will assign it to someone to review when she gets back in the office, since I am working on a project with a tight schedule and I won't have time to review it. Barbara is on vacation till 7/18.

How long does EPA have to review this draft post closure permit?

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Eshaghian, Mike@DTSC [mailto:Mike.Eshaghian@dtsc.ca.gov]
**Sent:** Monday, July 11, 2016 3:32 PM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Cc:** Eshaghian, Mike@DTSC <Mike.Eshaghian@dtsc.ca.gov>; Phil.Blum_dtsc.ca.gov <Phil.Blum@dtsc.ca.gov>
**Subject:** Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mr. Zabaneh,

I hope all is well. It has been a while since we have been in touch. I have attached a copy of the Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area. I understand that EPA also review our permits. Please let me know if you have any questions or comments. Thanks.

**To:** Swartz, Chris: (P66) (Chris.Swartz@p66.com)[Chris.Swartz@p66.com]
**Cc:** Landeck, Don R (P66) (Don.R.Landeck@p66.com)[Don.R.Landeck@p66.com]; Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]; Rizgar.Ghazi_dtsc.ca.gov[Rizgar.Ghazi@dtsc.ca.gov]; Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]; Bothwell, Nancy@DTSC[Nancy.Bothwell@dtsc.ca.gov]; Schievelbein, Kathie@DTSC[Kathie.Schievelbein@dtsc.ca.gov]; Hill, Candace@DTSC[Candace.Hill@dtsc.ca.gov]; Zhang, Yun@DTSC[Yun.Zhang@dtsc.ca.gov]; Kou, Roberto@DTSC[Roberto.Kou@dtsc.ca.gov]; Chavez, Sergio@DTSC[Sergio.Chavez@dtsc.ca.gov]; Gonzalez, Ricardo@DTSC[Ricardo.Gonzalez@dtsc.ca.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Tue 9/6/2016 3:43:13 PM
**Subject:** Draft Post Closure Permit, Land Treatment Area, Phillips 66 Company, Rodeo
Phillips 66 Public Notice Sept 6-2016.pdf
Phillips 66 Community Update LTA Sept 2016.pdf
Draft Permit Letter to Phillips 66 Sept 2016.pdf
Final P66 San Francisco Draft Post Closure Permit 9-6-2016.pdf

Attached please find a copy of the Public Notice, the Community Update, Draft Post Closure Permit and the DTSC letter for Phillips 66 Company, San Francisco Refinery Draft Post Closure Permit renewal for the former Land Treatment Area. The public comment period for the Draft Post Closure Permit starts September 6, 2016 and ends on October 24, 2016. If you have any questions, please do not hesitate to contact me..

Thank you,

Mike Eshaghian

Project Manager

Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

# Department of Toxic Substances Control

Barbara A. Lee, Director
9211 Oakdale Avenue
Chatsworth, California 91311

Edmund G. Brown Jr.
Governor

September 1, 2016

Mr. Don Bristol
Superintendent, Environmental Services Department
Phillips 66 Company, San Francisco Refinery
1380 San Pablo Avenue
Rodeo, California 94572

DRAFT POST CLOSURE PERMIT, LAND TREATMENT AREA, PHILLIPS 66 COMPANY, SAN FRANCISCO REFINERY, RODEO, CALIFORNIA
EPA ID NUMBER CAD 009108705

Dear Mr. Bristol:

The Department of Toxic Substances Control (DTSC) has prepared a Draft Hazardous Waste Facility Post Closure Permit based on the Approved Post Closure Permit Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015. . for the Land Treatment Area at the Phillips 66 Company, San Francisco Refinery, 1380 San Pablo Avenue, Rodeo, California 94572.

DTSC has prepared the draft Post Closure Permit and Administrative Record for public review. Enclosed please find a complete package of all the documents which have been presented for public review.

The public comment period for the Draft Post Closure Permit starts September 6, 2016 and ends on October 24, 2016. A Public Meeting will be conducted on September 21, 2016 at 6:00 p.m. at the Rodeo Senior Center, 189 Parker Avenue, Rodeo, California. DTSC will be proposing to approve the Post Closure Permit.

DTSC has also drafted a Notice of Exemption for the Post Closure Permit to comply with the California Environmental Quality Act.

Printed on Recycled Paper

If you have any questions regarding this letter, please contact the undersigned at (818) 717-6679.

Sincerely,

Mike Eshaghian

Mike Eshaghian
Project Manager
Permitting Division

Enclosures

cc: Mr. Chris Swartz
Site Manager
Risk Management & Remediation
Phillips 66 Company, San Francisco Refinery
1380 San Pablo Avenue
Rodeo, California 94572

Mr. Donald R. Landeck
Environmental Engineer
Environmental Services Department
Phillips 66 Company, San Francisco Refinery
1380 San Pablo Avenue
Rodeo, California 94572

Ms. Lindsay Whalin
Engineering Geologist
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

Mr. Mahfouz Zabaneh
Hazardous Waste Management Division
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

cc: Mr. Rizgar Ghazi (via e-mail)
Permitting Division
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Mr. Phil Blum, P.E. (via e-mail)
Permitting Division
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Ms. Nancy Bothwell (via e-mail)
Office of Legal Counsel
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Ms. Kathie Schievelbein (via e-mail)
Environmental Analysis and Regulations
Department of Toxic Substances Control
P.O. Box 806
Sacramento, California 95812-0806

Mr. Yun Zhang (via e-mail)
Geology and Remediation Engineering Branch
Department of Toxic Substances Control
8800 Cal Center Drive
Sacramento, California 95826-3200

Mr. Roberto Kou (via e-mail)
Enforcement and Emergency Response Division
Department of Toxic Substances Control
9211 Oakdale Avenue
Chatsworth, California 91311

Mr. Sergio Chavez (via e-mail)
Enforcement and Emergency Response Division
Department of Toxic Substances Control
1515 Toll House Road
Clovis, California 93612

# California Environmental Protection Agency
# Department of Toxic Substances Control
# DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

**Facility Name:**
Phillips 66 Company
San Francisco Refinery
1380 San Pablo Avenue
Rodeo, California 94572

Facility EPA ID Number:
CAD009108705

Effective Date:

Expiration Date:

**Owner Name:**
Phillips 66 Company
P.O. Box 4428
Houston, Texas 77210

**Operator Name:**
Phillips 66 Company
1380 San Pablo Avenue
Rodeo, California 94572

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Post Closure Facility Permit is hereby issued to: Phillips 66 Company

The Issuance of this Permit is subject to the terms and conditions set forth in the Approved Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015. The Permit consists of 35 pages including Figures 1, 2, 3 and 4 and Exhibit A (Tables 7-2, 7-3, 8-1, 8-2, 8-3, 8-4) of this Permit and Tables G-1, G-2, G-3 of Appendix G of the Approved Application.

_____
Phil Blum, P.E.
Supervising HSE I
Permitting Division
Department of Toxic Substances Control
Date: _____

ATTACHMENT "A"

PHILLIPS 66 COMPANY, SAN FRANCISCO REFINERY
1380 SAN PABLO AVENUE, RODEO, CALIFORNIA 94572
EPA ID NUMBER CAD009108705
DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT
LAND TREATMENT AREA

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. **Owner of Facility**
   Phillips 66 Company
   P.O. Box 4428
   Houston, Texas 77210

2. **Owner of Real Property**
   Phillips 66 Company
   P.O. Box 4428
   Houston, Texas 77210

3. **Operator of Facility**
   Phillips 66 Company
   1380 San Pablo Avenue
   Rodeo, California 94572

4. **Location**

The Phillips 66 Company San Francisco Refinery (the Facility) is an oil refinery located at 1380 San Pablo Avenue, Rodeo, California. A map showing the location of the Facility relative to its surrounding features is included as Figure 1. The Facility is an approximately 1,100-acre oil refinery including a 495-acre industrial area where the refining facilities and equipment are located. The remaining 605 acres are undeveloped lands. The Facility is located on the eastern shore of San Pablo Bay in Contra Costa County, California, north of the community of Rodeo. The Facility is mostly contained within a northwest-southeast trending valley commonly known as the Central Valley, and the accompanying ridge to the northeast which is referred to as Tormey Ridge. The Facility is intersected by the Interstate 80 (I-80) freeway.

The Land Treatment Area (LTA) is located in an undeveloped area in the southern portion of the Facility property. It is also identified as a small portion of County of Contra Costa Assessor's Parcel Number 358-010-008. The entire LTA occupies approximately 8.2 acres, of which 6.38 acres were used for land treatment of oily sludge and other wastes generated at the Facility between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches. See Figure 2. A legal description of the property is included within Appendix B of the Approved Application.

5. **Description of Facility Operations**

Petroleum refining operations began at this site in 1896. Currently, the refinery is permitted to process up to 117,000 barrels per day of feed at its crude processing units into a variety of products including butane, several grades of gasoline, diesel fuel, jet fuel, fuel oil, petroleum coke, and sulfur. The Permittee receives crude oil

and other feedstocks by vessels (ships and barges), trucks and pipelines. The Permittee delivers refined products to customers via tanker barge, rail cars, trucks, and pipelines. USEPA classifies the Facility in its current configuration as a Subcategory B (Cracking) refinery, according to the definition provided in 40 CFR §419.40.

From November 1975 until January 1983, Unocal Corporation (Unocal), a previous owner/operator, managed several oily waste streams at the LTA, including materials classified by EPA and DTSC as hazardous wastes under the federal Resource Conservation and Recovery Act (RCRA). All wastes received at the LTA during its operating life were generated at the Facility and were associated with Unocal's petroleum refining operations. The LTA ceased receiving waste in 1983, was formally closed in 1989, and has been in post-closure care since that time.

## 6. Facility History

The Facility is currently owned and operated by Phillips 66 Company. The Facility was operated by Unocal Corporation and its predecessors (principally Union Oil Company of California) from its inception until April 1997, when it was purchased by Tosco Corporation (Tosco).

Tosco was acquired by Phillips Petroleum Company (Phillips) on September 14, 2001. On August 30, 2002, Phillips and Conoco Inc. (Conoco) entered into a transaction in which ConocoPhillips, a Delaware Corp. publicly traded on the NYSE under the symbol COP, became the parent corporation and owner of all of the outstanding common stock of Phillips and Conoco. Both Phillips and Conoco survived the consummation of the above transaction as wholly-owned subsidiaries of ConocoPhillips. Tosco was also, on the date of that transaction, still a wholly-owned subsidiary of Phillips. On December 31, 2002, Phillips changed its name to ConocoPhillips Company. On December 31, 2002, immediately after giving effect to the above-referenced name change, Conoco merged with and into ConocoPhillips Company, with ConocoPhillips Company being the surviving entity. On January 1, 2003, Tosco merged with and into ConocoPhillips Company with ConocoPhillips Company being the surviving entity.

On April 26, 2012 ownership and operation of the San Francisco Refinery was transferred from ConocoPhillips Company to its wholly-owned subsidiary at that time, Phillips 66 Company. On May 1, 2012, ConocoPhillips, which wholly-owned its operating subsidiary ConocoPhillips Company, spun-off its refinery assets and operations to Phillips 66 and Phillips 66 Company became a direct and wholly-owned operating subsidiary of Phillips 66. Phillips 66 Company incorporated in Delaware on November 10, 2011.

The LTA was constructed in two phases between November 1975 and February 1976, and last received hazardous waste in January 1983. Unocal Corporation (Unocal), a previous owner and operator of the Facility, prepared a Closure Plan for

the LTA in April 1988. The Plan was revised and subsequently approved by the California Department of Health Services (DHS) (predecessor to DTSC) and the U.S. Environmental Protection Agency (EPA) on July 1, 1988 and August 2, 1988, respectively.

Closure activities were completed on October 15, 1989, and Unocal submitted the required closure certifications to DHS on December 5, 1989. DHS acknowledged acceptance of the LTA closure certification documents in a letter to Unocal dated December 27, 1989. Subsequently, in June 1990, Unocal submitted a hazardous waste facility Post-Closure Permit application for the LTA to the U.S. EPA. U.S. EPA issued the Post-Closure Permit with an effective date of August 12, 1991 which expired on August 12, 2001.

In June 2003, a Part A and Part B application was submitted by ConocoPhillips Company for post closure permit renewal. DTSC issued the Post Closure Permit for the LTA with an effective date of April 15, 2004.

On October 26, 2005, DTSC acknowledged closure certification for the Bulk Container Storage Unit. The Permittee continues to store hazardous waste in the Bulk Container Storage Unit for a period of ninety (90) days under its generator status.

On August 2, 2012, DTSC acknowledged closure certification for the Former Container Storage Unit.

DTSC issued a new Post Closure Permit for the Primary Basin with an effective date of February 21, 2012. On December 12, 2012, DTSC granted two separate Class 1* Permit Modifications for both the Primary Basin and the Land Treatment Area to Phillips 66 Company due to the new ownership that became effective in May 2012.

## 7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility's LTA shall be deemed to have started from the effective date of this Post Closure Permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

## 8. Post-Closure Closure Cost Estimate

The Post Closure Cost Estimate approved by DTSC is $1,516,763 (in 2014 dollars).

## PART III. GENERAL CONDITIONS

1. Permit Application Documents

The Part "A" Application dated July 10, 2015 and the DTSC-approved Post Closure Permit Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015 (Approved Application) are hereby made a part of this Permit by reference.

2. Effect of Permit

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility's LTA.

(b) The Permittee is permitted to operate, monitor and maintain this Facility's LTA post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes at the Land Treatment Area not specifically authorized in this Permit or otherwise authorized by DTSC is strictly prohibited.

(c) Compliance with the terms and conditions of this Permit does not constitute a complete defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or

falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., title 22, §66270.43).

(g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards (RWQCB) and any conditions imposed pursuant to section 13227 of the Water Code.

3. Compliance with California Environmental Quality Act (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in title 14, California Code of Regulations, section 15070 et seq.

4. Environmental Monitoring

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6 and 17.

(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility's LTA are those described in in Section 8 and Appendix G of the Approved Application.

(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility's LTA is described in Section 8 and in Appendix G of the Approved Application.

(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility's LTA are described in Sections 3.2.3 of Appendix G of the Approved Application. During future sampling events, if the Permittee finds constituents listed in title 22 California Code of Regulations, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Permittee shall add them to the list of COCs in Appendix G. Table 8-2, 8-3 and 8-4 as well as Table G-2 and G-3 of Appendix G of the Approved Application provides soil and groundwater monitoring program, analytical summary and frequency of sampling (see Exhibit A).

(d) For the purpose of California Code of Regulations, title 22, section 66264.94,

the Concentration Limits for the Facility is described in section 8.10 and Table 8.4 of the Approved Application (see Exhibit A).

(e) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility's LTA are described in Sections 7.2.1.8, 8.7 and Sections 2 and 3 of Appendix G of the Approved Application. Also see Tables 8-2, and 8-3 of the Approved Application (see Exhibit A).

(f) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility's LTA shall be 30 years beginning with the date of the issuance of the post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

(g) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in sections 2.2.5 and 3.2.6 of Appendix G of the Approved Application.

(g) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility's LTA is described in section 7.2.1.8 and Appendix G of the Approved Application. Permittee shall submit a post closure annual soil and groundwater monitoring report after each annual soil and groundwater monitoring and sampling event to DTSC.

(h) The Permittee shall comply with the requirements of the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order or requirement by the RWQCB. A copy of all semi-annual and annual groundwater monitoring reports (facility-wide) submitted to the RWQCB shall also be submitted to DTSC simultaneously.

5. Annual Hazardous Waste Reduction and Minimization Certification

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).

6. Access

(a) DTSC, its contractors, employees, agents, and/or any United States

Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance of the unit and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit, other than those specified in this Part IV, unless otherwise authorized by DTSC. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of title 22, California Code of Regulations, section 66270.1(c) and other similar, unit-specific regulatory requirements, this Facility has one post closure Hazardous Waste Management Unit (Land Treatment Area) for the purpose of this Permit. Post Closure requirements for the Primary Basin are covered under a separate Permit. The Land Treatment Area is described in detail in the Approved Application and is as follows:

UNIT NAME:

Land Treatment Area (LTA)

LOCATION:

The LTA is located in an undeveloped area in the southern portion of the Facility property. The LTA is within the fence line of the Facility and is part of a “buffer zone” that separates the operating areas of the facility from neighboring properties. The LTA is located within an area zoned as heavy industrial. The community of Rodeo is situated west of the LTA and is zoned for a mixture of residential, business, and commercial uses. The 2010 census indicated that there were 3,137 dwelling units and a population of 8,679 persons in Rodeo. The closest residential area is approximately one-half mile south of the LTA. Areas to the east and north of the LTA are zoned for agricultural use, and are primarily pasture for grazing cattle and horses.

ACTIVITY TYPE:

Conduct post closure activities, groundwater monitoring, soil sampling, inspection and maintenance of wells and cap/vegetative cover.

ACTIVITY DESCRIPTION:

Soil Monitoring: The required annual soil monitoring program includes six target locations (one location within each of the four quadrants of the LTA and two locations corresponding to low points in the LTA where water has historically ponded during significant rain events) are selected for the soil monitoring, with subsequent soil sample locations in future sampling events located within a 10 foot radius of the target locations (see attached Figures 2 and 3). Each of the six sample locations will be surveyed to establish documented location information. A surveyor will be used to re-locate the target sample locations in subsequent

soil sampling events.

Based on the known subsurface conditions of the vadose zone, it is assumed that soil samples collected from within a 10-foot radius of the target sample locations would represent similar subsurface soil conditions. The annual soil monitoring program including proposed sample locations, sampling schedule, constituents of concern, sampling methodology, and data evaluation procedures for the LTA is described in section 2 of Appendix G and the soil monitoring analytical summary shown in Table G-1 of Appendix G of the Approved Application. The annual soil sampling will be conducted during the same general time period as the annual groundwater sampling.

Groundwater Monitoring: Based on the consistent groundwater flow direction towards the southwest, groundwater samples will be collected annually from one background well (PZ-2R-1) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). All wells at the LTA (PZ-2R-1, VMW-11, PCW-12, PCW-13, PCW-14, PCW-15, CW-16, CW-17 and CW-18) will be gauged as well.

Groundwater quality samples will be collected annually from the one background well at three different elevations (PZ-2R-1, PZ-2R, or PZ-2RD) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). The background well location consists of three collocated piezometers completed at different depths (PZ-2R-1, PZ-2R, and PZ-2RD, listed in increasing completion depth) to account for seasonal groundwater fluctuations (i.e., the shallowest piezometer was occasionally dry). The shallowest of the three piezometers where water is encountered will be gauged/sampled as the background well. Annual well sampling is considered appropriate due to the stability of the groundwater conditions at the LTA. The annual groundwater monitoring program including proposed sample locations, sampling schedule, constituents of concern, sampling methodology, and data evaluation procedures for the LTA is described in section 3 of Appendix G and groundwater program analytical summary shown in Table G-3 of Appendix G of the Approved Application. The annual groundwater sampling will be conducted during the same general time period as the annual soil sampling. The groundwater gauging and sampling frequency summary is shown on Table G-2 of Appendix G of the Approved Application. Table 8-1, 8-2, 8-3 and 8-4 as well as Table G-1, G-2 and G-3 of Appendix G of the Approved Application provides soil and groundwater monitoring program, analytical summary and frequency of sampling (see Exhibit A).

Cover Maintenance: The vegetative cover of native grasses established on the surface of the LTA is maintained to minimize wind and rain erosion of the clean soil cap placed over the treatment zone. This is required to comply with California Code of Regulations, title 22, §§66264.280(c)(3) and 66264.280(c)(5). In addition, bare spots that develop in the vegetative cover during the post-closure period are replanted with appropriate plant species when discovered and as weather conditions permit. Burrow holes observed in the cover not covered with plant growth will be filled with imported soil.

Inspections and Reporting: The inspection checklist for the LTA and monitoring wells are listed in Appendix E of the Approved Application. Table 7-2 and 7-3 of the Approved

Application provides LTA Maintenance and Inspection Requirements.(see Exhibit A). The annual reports of soil and groundwater monitoring and inspections shall be submitted to DTSC by March 1 annually.

PHYSICAL DESCRIPTION:

The entire LTA occupies approximately 8.2 acres, of which 6.4 acres were used for land treatment of oily sludge and other wastes generated at the Facility between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches.

The LTA consists of a fairly level area with an average elevation of 170 feet above mean sea level. Most of the down slope portion of the LTA is underlain with approximately 40 feet of fill material. The hills surrounding the valley that contains the LTA attain a maximum elevation of approximately 740 feet above mean sea level. The valley is drained by a small, unnamed stream that flows to the northwest through the Facility property and into San Pablo Bay.

The LTA is constructed on engineered fill. The treatment zone is contained horizontally on northern, eastern and southern sides by dikes of clayey fill and on the western side by a natural bedrock height. Vertically, the treatment zone extends to between 1 foot and 2 feet below grade over most of the LTA, and to 3.8 feet below grade in the southwestern corner. Most of the treatment zone is underlain by fill material comprised of silt and sandy clay. A narrow strip on the western side of the LTA that abuts a natural topographic height is the only portion of the treatment zone that is in contact with bedrock materials.

Direct precipitation during particularly wet winters tends to accumulate in the down slope portions on both the eastern and western sides of the LTA. In the summer of 1986, a drainpipe was installed in the dike between the two sides of the LTA to allow the eastern side to drain to the western side by gravity. The dike was recompacted to ensure its structural integrity. The western side of the LTA has always been drained by a pump, which transfers rainwater by pipeline to the process sewer and ultimately to the Facility's NPDES-regulated wastewater treatment facilities.

The LTA does not have a liner but does have a cap that consists of six inches of clean soil and a vegetative cover (CAP) that were placed over the surface of the LTA after completion of active treatment.

MAXIMUM CAPACITY:

The LTA treated about 23,460 tons of waste material during its active life.

WASTE SOURCES:

From construction of the LTA until April 1979, the wastes treated in the unit totaled

approximately 3,950 tons and consisted mainly of Dissolved Air Flotation (DAF) float (EPA Waste Number K048) and storm basin sediment from the Facility's wastewater treatment plant. Between April 1979 and January 1983, an estimated total of 17,900 tons of material was treated at the LTA, including seven major waste types: storm basin sediment from the Facility's wastewater treatment plant; DAF float; slop oil tank solids; API separator sludge; emulsion breaking tank waste; asphalt solvent tank waste; cracked naphtha tank waste, as well as various miscellaneous oily sludges and other hazardous and non-hazardous wastes. In addition, plant records indicate that 2,150 barrels (360 tons) of crude oil bottom sediments from Tank 154 were applied to the eastern side of the LTA, and 8,500 barrels (1,430 tons) of unspecified oily wastes were applied to both the eastern and western sides of the LTA.

WASTE TYPES:

The identified hazardous wastes managed in this unit can be classified into seven main types: storm basin sediment, DAF float, slop oil tank solids, API separator sludge, emulsion breaking tank waste, asphalt solvent tank waste, cracked naphtha tank waste. In addition, various miscellaneous oily sludges and other hazardous and non-hazardous wastes, crude oil bottom tank sediments and unspecified oily wastes were applied to LTA.

RCRA WASTE CODES:

Listed hazardous wastes applied to the LTA, and their associated waste codes provided in 40 Code of Federal Regulations, section 261.32, included DAF float (EPA Waste Number K048), slop oil emulsion solids (EPA Waste Number K049), and API separator sludge (EPA Waste Number K051). The Refinery wastes and the quantity of the wastes that were disposed of to the LTA between April 1979 and January 1983 are listed in the Appendix A of the approved Permit Application.

## PART V. SPECIAL CONDITIONS

1. The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1 and shall include the monitoring and response program data in the Annual Report.

2. The Permittee shall conduct inspection, visual monitoring, and maintenance during the post closure care period as described in Section 7 and 8 and Appendices E and G of the Approved Application. The inspection and maintenance report must be included in the Annual Report submitted to DTSC.

3. The Permittee shall monitor the groundwater in accordance with the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order and in accordance with Section 8 and Appendix G of the Approved Application. The Permittee shall simultaneously submit to DTSC a copy of the semi-annual and annual groundwater monitoring reports required by the RWQCB.

4. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application and by California Regional Water Quality Control Board San Francisco Bay Region Order (Order) issued to the Permittee in November 2015 and any other future order or requirement by the RWQCB.

5. Groundwater samples shall be collected and analyzed as required in the Approved Application from one background well (PZ-2R-1) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). Additionally, once every five years, each of the compliance monitoring wells shall be sampled and analyzed for the constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX. All wells at the LTA (PZ-2R-1, VMW-11, PCW-12, PCW-13, PCW-14, PCW-15, CW-16, CW-17 and CW-18) shall be gauged as well. The annual reports of soil and groundwater monitoring and inspections shall be submitted to DTSC by March 1 annually.

6. Soil samples shall be collected and analyzed as required in section 2 of Appendix G of the Approved Application. Also see Table 8-1 as well as Table G-1 of Appendix G of the approved Permit Application.

7. The Permittee shall comply with section 66264.280(c) and shall inspect the vegetative cover to make sure the bare spots that develop in the vegetative cover during the post-closure period are replanted with appropriate plant species when discovered and as weather conditions permit. Burrow holes observed in the cover not covered with plant growth shall be filled with imported soil or sealed with bentonite cement slurry. See Section 7.2.1.4 and Tables 7-2 and 7-3 of the approved Permit Application.

8. Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 90 days of the effective date of this Permit, the Permittee shall submit a proposed Land Use Covenant to DTSC for review and approval. Upon final approval and execution by DTSC and Permittee, Permittee shall, within 180 days, have the fully executed Land Use Covenant recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement to: Department of Toxics Substances Control, Accounting Unit, P.O. Box 806, Sacramento, California 95812-0806. All payments shall reference the name and address of the Facility.

9. DTSC may request additional Monitoring if new data indicates downward migration of contamination to soil and/or groundwater from the regulated unit.

# PART VI. CORRECTIVE ACTION

## A. SUMMARY OF THE CORRECTIVE ACTION AND GROUNDWATER REMEDIATION

Based on the findings of a RCRA Facility Assessment on February 24, 1989, the U.S. EPA issued an Administrative Order (EPA Docket No. RCRA 09-89-0012) under RCRA Section 3008(h.) This Administrative Order required investigation and, if necessary, corrective action for releases to the environment from six Solid Waste Management Units (SWMUs) at the Facility. The requirements of the U.S. EPA Order were subsequently modified and incorporated into the 1991 Post-Closure Permit for the Land Treatment Area (LTA).

The California Regional Water Quality Control Board San Francisco Bay Region (RWQCB) has issued a series of Waste Discharge Requirements (WDRs) requiring monitoring for leaks or spills from the refinery's surface impoundments and landfills. The specific requirements for corrective action at the Facility are incorporated in the following Order and any subsequent Order. RWQCB Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order that required investigation and remediation at several areas of concern, as well as maintenance of a perimeter containment and removal system along the San Pablo Bay Shoreline.

### IMPLEMENTED CORRECTIVE ACTION AT AREAS OF CONCERN (AOCS)

A free-phase liquid hydrocarbon (FPLH) recovery program and the following operating recovery systems serve to remediate and control contaminated groundwater and FPLH associated with the AOCs:

1. Interceptor Trench (Alignments A, B, C, and D);
2. B-Zone Extraction System;
3. Tank 302 Area Interceptor Trench (Alignment E);
4. Primary Basin/Main Storm Basin Extraction System;
5. Unit 76 Active Skimming System;
6. Tank 100 Area Interceptor Trench; and,
7. Marine Terminal Groundwater Protection System

These systems and the FPLH recovery program were implemented as part of the overall Groundwater Quality Management Program for the Facility. The Interceptor Trench, B-Zone Extraction System, and Marine Terminal Groundwater Protection System hydraulically

control groundwater near the downgradient perimeter of the Facility. The Primary Basin/Main Storm Basin Extraction System and the Unit 76 Active Skimming System mitigate interior "hot spots" of impacted groundwater.

STATUS OF CORRECTIVE MEASURES

Each corrective measure required by the RWQCB Order has been implemented at the Facility. An evaluation of the effectiveness of each of the corrective measures is provided to the RWQCB on a semi-annual basis, and in an annual summary.

B. CORRECTIVE ACTION CONDITIONS

1. The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the Regional Water Quality Control Board (RWQCB) pursuant to the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order or requirements by the RWQCB or USEPA.

# FIGURES

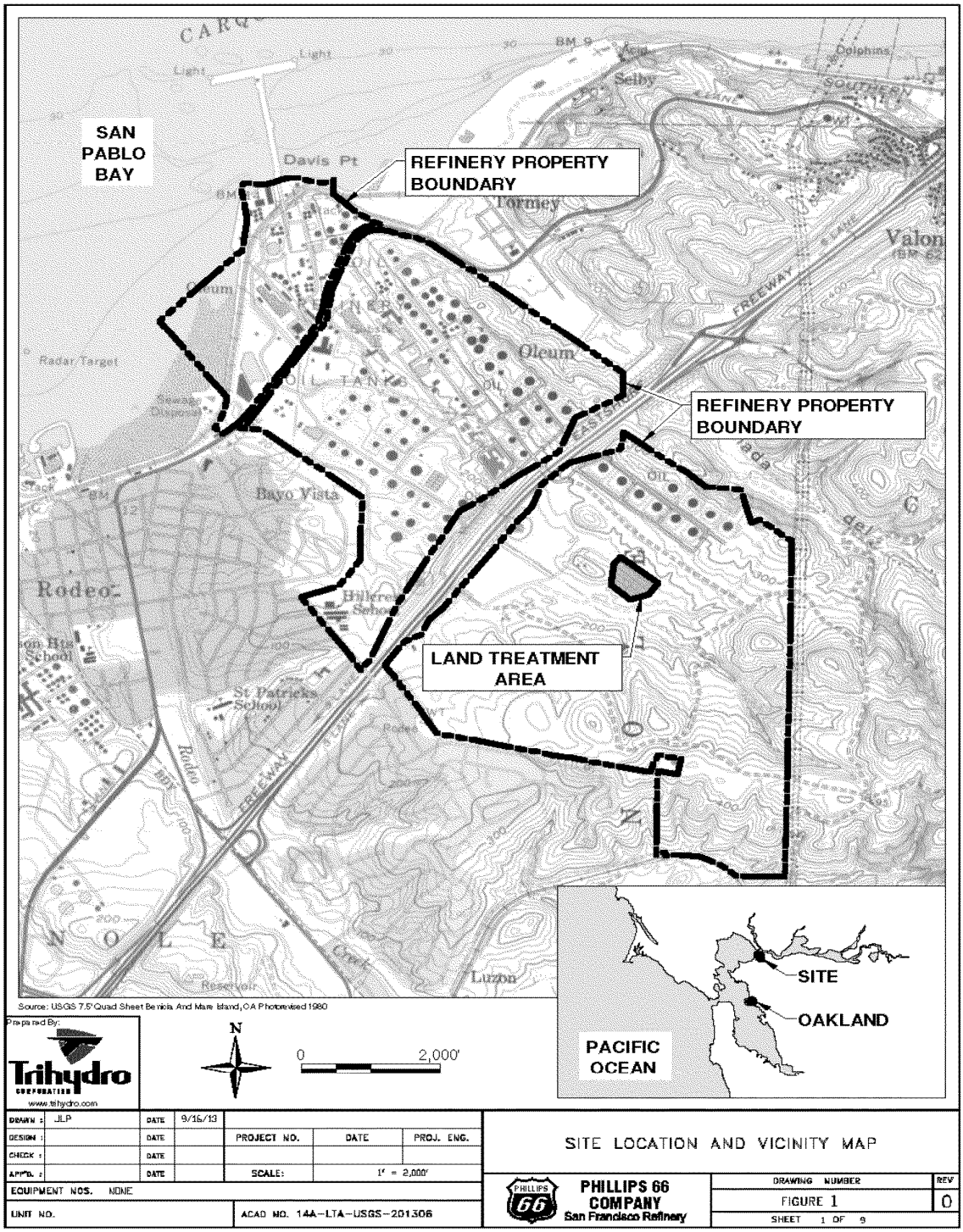



FIGURE 1 – Site Location and Vicinity Map

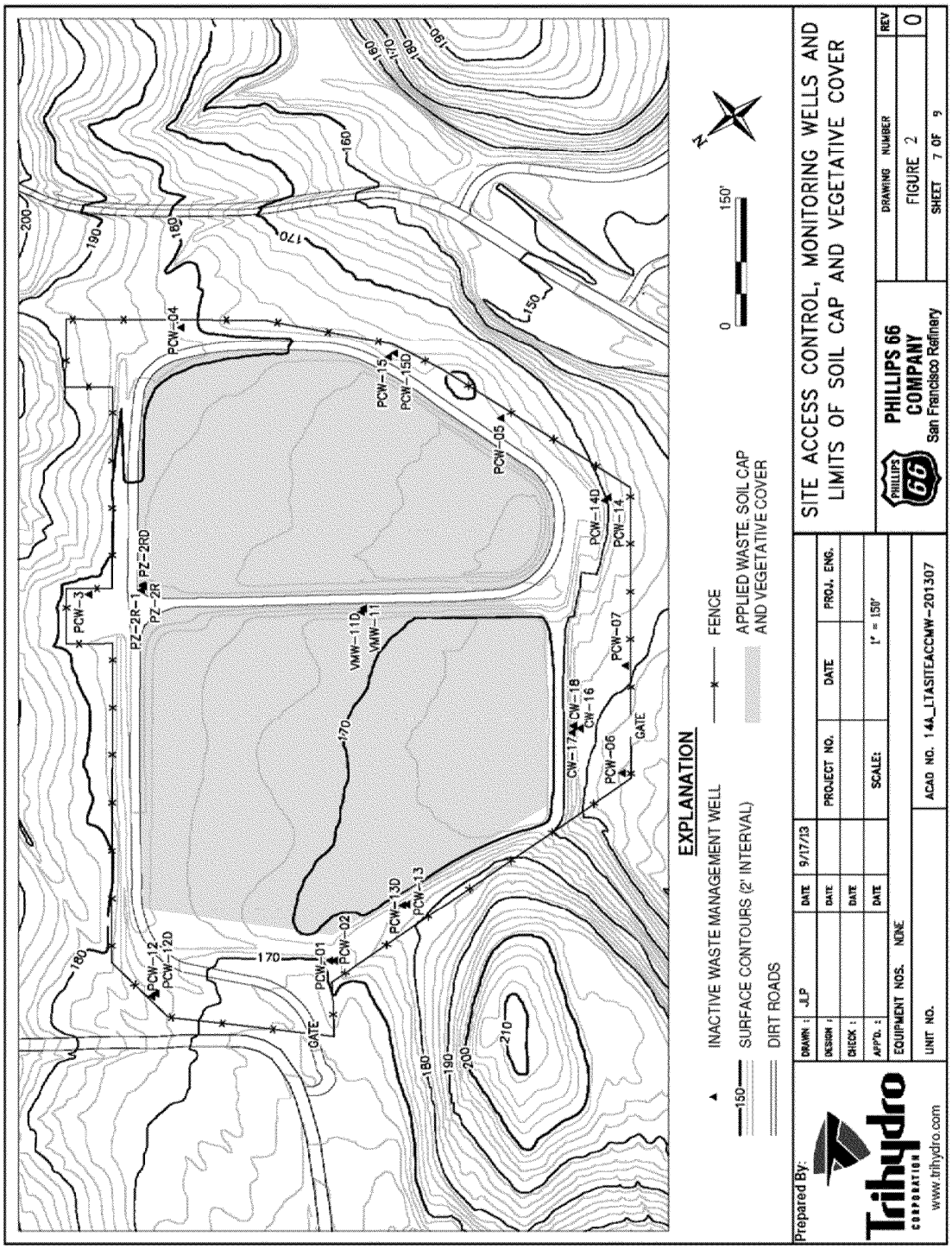



FIGURE 2 – Site Access Control, Monitoring Wells and Limits of Soil Cap and Vegetative Cover

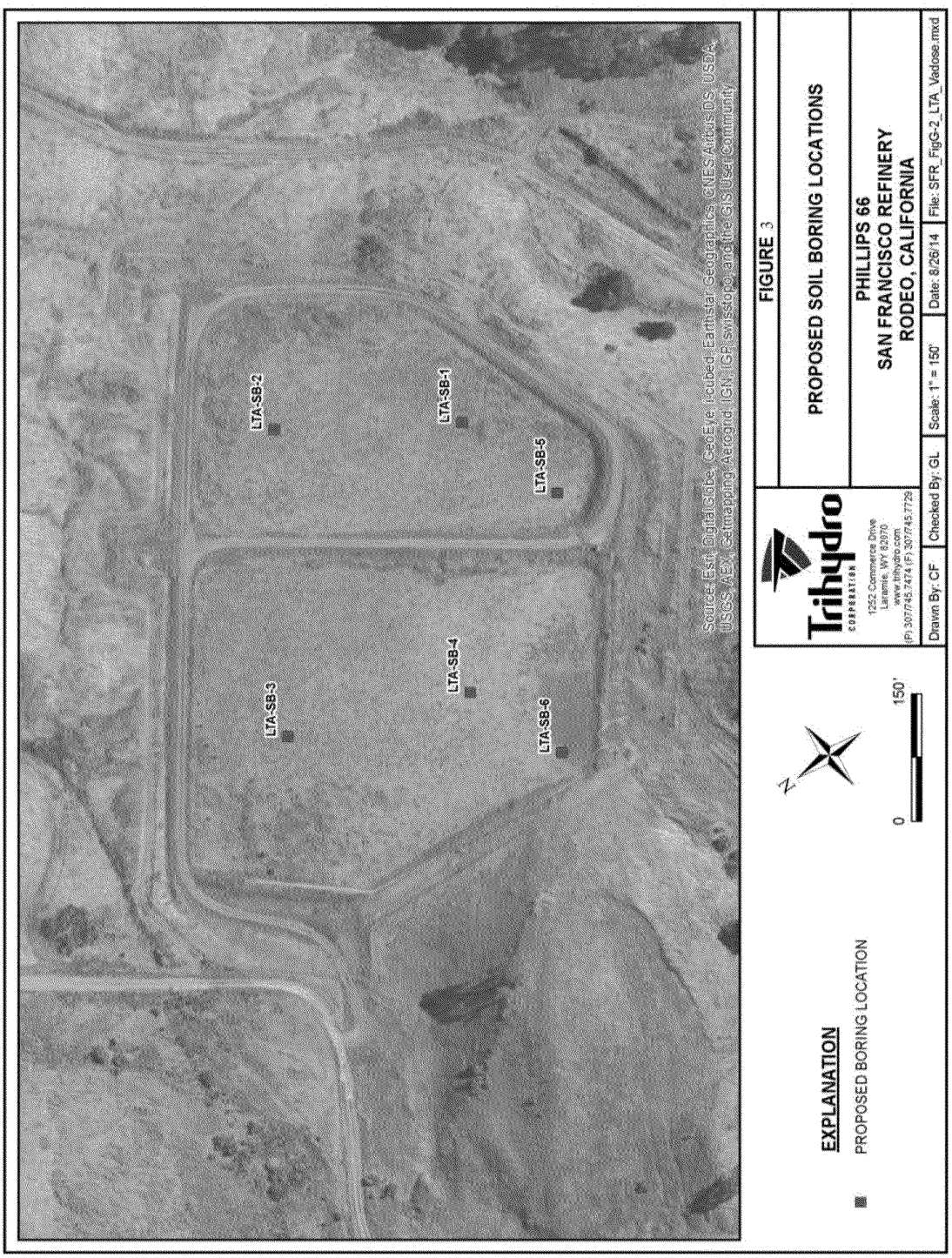



FIGURE 3 – Proposed Soil Boring Locations

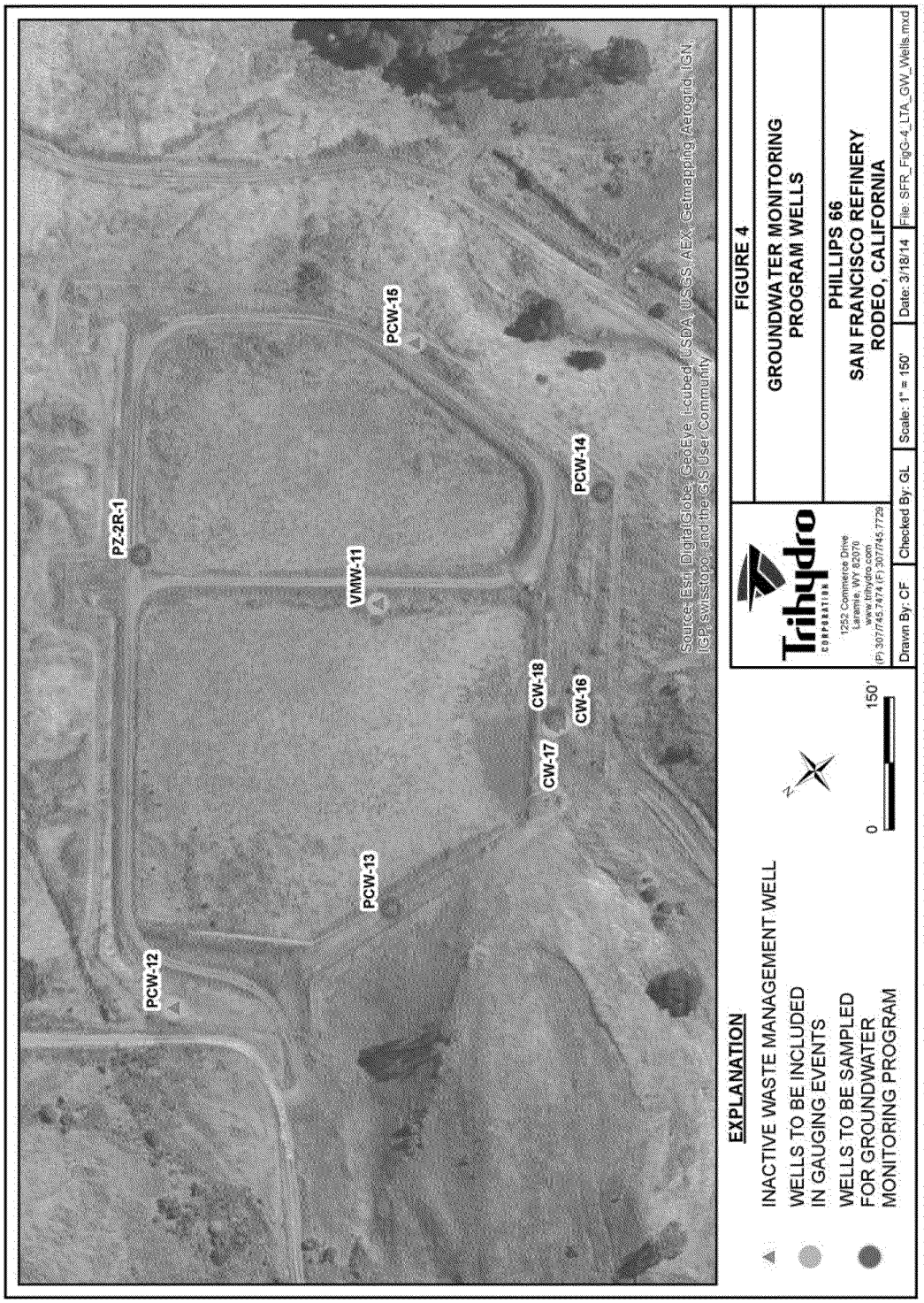



FIGURE 4 – Groundwater Monitoring Program Wells

# EXHIBIT A - Tables

**TABLE 7-2. LTA MAINTENANCE REQUIREMENTS**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Item | Frequency |
|---|---|
| LTA perimeter fence and warning signs | Within 30 days of discovery of need for maintenance. |
| Monitoring wells and piezometers | 1. Minor repairs-within 30 days of discovery of need for maintenance.<br>2. Replacement-after approval by RWQCB and DTSC. |
| Run-on and runoff control systems | 1. Berms-within 30 days of discovery of need for maintenance.<br>2. Pump-September to October of each year and within 30 days of discovery of need for maintenance.<br>3. Pipeline-within 30 days of discovery of need for maintenance. |
| Vegetative cover | Patching-as required and weather permitting. |

**TABLE 7-3. LTA INSPECTION REQUIREMENTS**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Item | Frequency |
|---|---|
| LTA perimeter fence and warning signs | Spring and fall of each year. |
| Monitoring wells and piezometers | Spring and fall of each year. |
| Run-on and runoff control systems | 1. Each October of every year (prior to rainy season).<br>2. First business day after each storm event.<br>3. Monthly from October 1 through May 1 of each year. |
| Vegetative cover | Spring and fall of each year. |

**TABLE 8-1. ANALYTICAL CONSTITUENTS FOR SOIL SAMPLES COLLECTED AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Analytical Method |
|---|---|
| pH | EPA 9045C |
| Total Petroleum Hydrocarbons as Diesel (TPH- D) with Silica Gel Cleanup | EPA 3630C/ EPA 8015M |
| Total Petroleum Hydrocarbons as Gasoline (TPH-G) | EPA 8260B |
| Total Oil and Grease (TOG) | EPA 1664HE |
| Chromium | EPA 6010B |
| Mercury | EPA 7471 |
| Lead | EPA 6010B |
| Nickel | EPA 6010B |
| Selenium | EPA 6010B |
| Vanadium | EPA 6010B |
| Zinc | EPA 6010B |
| Total Kjeldahl Nitrogen (TKN) | EPA 351.2M |
| Volatile Organic Compounds (VOCs) | EPA 8260B[a] |
| Semi-Volatile Organic Compounds (SVOCs) | EPA 8270C[a] |

[a] As outlined in the June 1990 RCRA Post-Closure Permit Application (Brown and Caldwell, June 1990) and incorporated into the June 28, 1991 Post-Closure Permit and the April 15, 2004 Post-Closure Permit by reference. Samples collected from the boring with the highest TOG concentrations are to be analyzed for VOCs and SVOCs.

**TABLE 8-2. MONITORING WELLS SAMPLED DURING POST-CLOSURE AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Description/Location |
|---|---|
| PZ-2R | Upgradient well for LTA. Monitors shallow groundwater zone for background concentrations of hazardous waste constituents. |
| VMW-11 | Located within southwest portion of LTA, monitors shallow groundwater directly beneath the treatment area. |
| PCW-12 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-13 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-14 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-15 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| CW-16 | Deep well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater in relatively unweathered bedrock. |
| CW-17 | Intermediate-depth well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring across the fill/bedrock contact and in the lower portion of the fill interval. |
| CW-18 | Shallow well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring in the fill material overlying the drainage channel. |

**TABLE 8-3. ANALYTICAL METHODS FOR GROUNDWATER SAMPLES FROM MONITORING WELLS AT THE LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Analytical Method |
|---|---|
| pH | EPA 9040 |
| Specific conductance | EPA 120.1 |
| Chromium | EPA 6010B |
| Nickel, vanadium and zinc | EPA 6010B |
| Selenium | EPA 6010B |
| Lead | EPA 6010B |
| Mercury | EPA 7470A |
| Total dissolved solids (TDS) | EPA 160.1 |
| Volatile organic compounds (VOCs) | EPA 8260B |
| Semi-volatile organic compounds (SVOCs) | EPA 8270C |

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Total Petroleum Hydrocarbons (TPH) as gasoline | 50 ug/L | PQL | 0.2 mg/kg | PQL |
| Total Petroleum Hydrocarbons (TPH) as diesel (with silica gel) | 50 ug/L | PQL | 2 mg/kg | PQL |
| Total oil and grease (TOG) | 5 mg/L | PQL | 50 mg/kg | PQL |
| Chromium | 0.05 mg/L | MCL | 160 mg/kg | LBNL, 2009 [c] |
| Mercury | 0.002 mg/L | MCL | 0.2 mg/kg | LBNL, 2009 [c] |
| Lead | 0.0524 mg/L | 95% UCL[a] | 48 mg/kg | LBNL, 2009 [c] |
| Nickel | 0.1 mg/L | MCL | 55 mg/kg | LBNL, 2009 [c] |
| Selenium | 0.05 mg/L | MCL | 1.1 mg/kg | LBNL, 2009 [c] |
| Vanadium | 0.003 mg/L | PQL (no MCL available) | 230 mg/kg | LBNL, 2009 [c] |
| Zinc | 0.01 mg/L | PQL (no MCL available) | 150 mg/kg | LBNL, 2009 [c] |
| Volatile Organic Compounds (VOCs) | | | | |
| Benzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromochloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromodichoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromoform | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromomethane | 1 ug/L | PQL | 0.005 mg/kg | PQL |
| n-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| sec-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| tert-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Carbon Tetrachloride | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloroform | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 2-Chlorotoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 4-Chlorotoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dibromochloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dibromo-3-chloropropane | 1.0 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dibromoethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dibromomethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,3-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,4-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dichlorodifluoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1-Dichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Volatile Organic Compounds (VOCs) (continued) | | | | |
| cis-1,2-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| trans-1,2-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Ethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Hexachlorobutadiene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Isopropylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| p-Isopropyltoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Methylene chloride | 1 ug/L | PQL | 0.01 mg/kg | PQL |
| Methyl tert-butyl ether | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Naphthalene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Styrene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2,2-Tetrachloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Tetrachloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Toluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,3-Trichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,4-Trichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,1-Trichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2-Trichoroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Trichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Trichlorofluoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,3-Trichloropropane | 1 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2-Trichloro-1,2,2-trichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,4-Trimethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,3,5-Trimethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Vinyl chloride | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Total Xylenes | 1 ug/L | PQL | 0.01 mg/kg | PQL |
| p- & m-Xylenes | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| o-Xylene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Semi-Volatile Organic Compounds (SVOCs) | | | | |
| Acenapththene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Acenapthylene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Aldrin | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Aniline | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| Anthracene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzidine | 20 ug/L | PQL | 3 mg/kg | PQL |
| Benzo(a)anthracene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(b)fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(k)fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(a)pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(g,h,i)perylene | 2 ug/L | PQL | 0.1 mg/kg | PQL |

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Semi-Volatile Organic Compounds (SVOCs) (continued) | | | | |
| Benzoic acid | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| Benzyl alcohol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzyl butyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| alpha-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| beta-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| delta-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| gamma-BHC (Lindane) | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethoxy) methane | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethoxy) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethyl) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroisopropyl) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Ethylhexyl) phthalate | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 4-Bromophenyl phenyl ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chloroaniline | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Chloronaphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chlorophenyl phenyl ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Chrysene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,4'-DDE | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,4'-DDT | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Dibenzo(a,h)anthracene | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Dibenzofuran | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2-Dichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,3-Dichorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,4-Dichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3,3-Dichlorobenzidine | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Dieldrin | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Diethylphthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Dimethyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Di-n-butyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dinitrotoluene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,6-Dinitrotoluene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Di-n-octyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2-Diphenylhydrazine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Endosulfan I | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Endosulfan II | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Endosulfan sulfate | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Endrin | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| Endrin Aldehyde | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| Fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Fluorene | 2 ug/L | PQL | 0.1 mg/kg | PQL |

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Semi-Volatile Organic Compounds (SVOCs) (continued) | | | | |
| Heptachlor | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Heptachlor epoxide | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Hexachlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Hexachlorobutadiene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Indeno(1,2,3-CD)pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Isophorone | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Methylnaphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Naphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Naphthylamine | 20 ug/L | PQL | 3 mg/kg | PQL |
| 2-Nitroaniline | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3-Nitroaniline | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| 4-Nitroaniline | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| Nitrobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitrosodimethylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitroso-N-propylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitrosodiphenylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Phenanthrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2,4-Trichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chloro-3-methylphenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 2-Chlorophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dichlorophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dimethylphenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,6-Dinitro-2-methlyphenol | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| 2,4-Dinitrophenol | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| 2-Methylphenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3- & 4-Methylphenol | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| 2-Nitrophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Nitrophenol | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| Pentachlorophenol | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| 2,4,5-Trichlorophenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 2,4,6-Trichlorophenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |

Notes:

CL - Concentration Limit

MCL - Maximum Contaminant Level http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.shtml (accessed 1-15-15)

PQL - Practical Quantitation Limit, as established by California certified analytical laboratory for test methods included in Table 7-1 and 7-3.

[a] Background concentration for metals in groundwater calculated by computing the mean and determining a 95% upper confidence limit based on data from upgradient well PZ-2R.

[b] Proposed Vadose Soil CLs are only applicable to samples collected below the treatment zone and are not applicable to those collected within the LTA.

[c] Lawrence Berkeley National Laboratory (LBNL). 2009. Analysis of Background Distribution of Metals in the Soil at Lawrence Berkeley National Laboratory. Revised. Values used are the Upper Estimate of Regional Background Values (Table 4 of Report), based on Shacklette and Boerengen (1984) for the western conterminous United States.

## TABLE G-1. SOIL MONITORING PROGRAM ANALYTICAL SUMMARY
## LAND TREATMENT AREA
## PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA

| Location | Chromium, Lead, Mercury, Selenium, Vanadium and Zinc (EPA Method 6010B/7000 Series) | pH (EPA Method 9040) | Total Petroleum Hydrocarbons as gasoline (EPA Method 8015M/8260B) | Total Petroleum Hydrocarbons as diesel with silica gel (EPA Method 8015M and 3630C) | Total Oil and Grease (EPA Method 1664HE) | Total Kjeldahl Nitrogen (EPA Method 351.4) | Volatile Organic Compounds (EPA Method 8260B) | Semivolatile Organic Compounds (EPA Method 8270C) |
|---|---|---|---|---|---|---|---|---|
| LTA-SB-1 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-2 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-3 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-4 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-5 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-6 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |

Notes:

Sampling Schedule for Annual events are for ten years (2015-2024)

Annual samples are to be collected from within 10 feet of Year 1 sample location and only in the vadose zone.

**TABLE G-2. GROUNDWATER GAUGING AND SAMPLING FREQUENCY SUMMARY**
**LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Description/Location | Groundwater Gauging | Groundwater Sample Collection |
|---|---|---|---|
| PZ-2R-1 | Upgradient well for LTA, located outside of treatment zone. Monitors shallow groundwater zone for background concentrations of hazardous waste constituents. Three wells are co-located but are completed at different depths to account for seasonal groundwater fluctuations - PZ-2 (known as PZ-2R-1) with a total depth of ~38 feet, PZ-2R with a total depth of ~45 feet, and PZ-2RD with a total depth of ~65 feet. The shallowest well where water is encountered will be gauged/sampled. | Annual Measurement | Annual Collection |
| VMW-11 | Located within southwest portion of LTA, monitors shallow groundwater directly beneath the treatment area. | Annual Measurement | NA |
| PCW-12 | Located near northern corner of LTA (cross/up-gradient location) | Annual Measurement | NA |
| PCW-13 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. | Annual Measurement | Annual Collection |
| PCW-14 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. | Annual Measurement | Annual Collection |
| PCW-15 | Located near southern corner of LTA (crossgradient location). | Annual Measurement | NA |
| CW-16 | Deep well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater in relatively unweathered bedrock. | Annual Measurement | NA |
| CW-17 | Intermediate-depth well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring across the fill/bedrock contact and in the lower portion of the fill interval. | Annual Measurement | NA |
| CW-18 | Shallow well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring in the fill material overlying the drainage channel. | Annual Measurement | Annual Collection |

Notes:
LTA - Land Treatment Area
NA - Not Applicable

## TABLE G-3. GROUNDWATER PROGRAM ANALYTICAL SUMMARY
## LAND TREATMENT AREA
## PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA

| Well | Dissolved Chromium, Lead, Mercury, Selenium, Vanadium and Zinc (EPA Method 200.8 and 245.1) | pH (EPA Method 150.1) | Total Dissolved Solids (EPA Method 160.1) | Volatile Organic Compounds (EPA Method 8260B) | Semivolatile Organic Compounds (EPA Method 8270C) | Appendix IX List (EPA Method 8260B, 8270C, 8141BG, 8081, 8082, 8151A, 200.8, 245.1, 9010, 9030, and 8280) |
|---|---|---|---|---|---|---|
| PZ-2R-1* | Annual | Annual | Annual | Annual | Annual | 5-Year |
| PCW-13 | Annual | Annual | Annual | Annual | Annual | 5-Year |
| PCW-14 | Annual | Annual | Annual | Annual | Annual | 5-Year |
| CW-18 | Annual | Annual | Annual | Annual | Annual | 5-Year |

Notes:
* = Three wells are co-located at PZ-2 but are completed at different depths to account for seasonal groundwater fluctuations - PZ-2 (known as PZ-2R-1) with a total depth of ~38 feet, PZ-2R with a total depth of ~45 feet, and PZ-2RD with a total depth of ~65 feet. The shallowest well where water is encountered will be sampled.

Sampling Schedule for 30-year events are Annual events from 2015-2045, except for 5-year events which are 2019, 2024, 2029, 2034, 2039, and 2044.

Annual - Indicates analyses except for 5-year events

Appendix IX List is noted in CCR Title 22, Division 4.5, Chapter 14, Article 19. Analytes include volatile organic compounds, semivolatile organic compounds, organophosphorous pesticides, organochlorine pesticides, polychlorinated biphenyls, chlorinated herbicides, dissolved metals, cyanide, sulfide, and 2,3,7,8-tetrachlorodibenzodioxin.

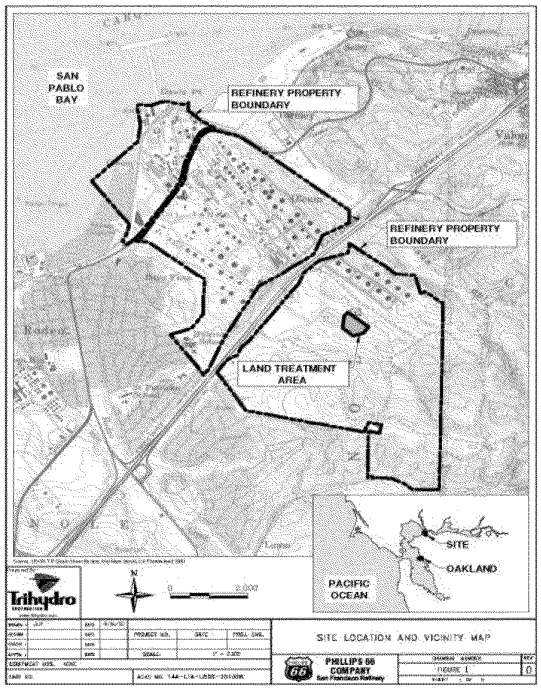
The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances by restoring contaminated resources, enforcing hazardous waste laws, reducing hazardous waste generation, and encouraging the manufacture of chemically safer products.

# Phillips 66 Company, San Francisco Refinery
# 1380 San Pablo Avenue, Rodeo, California, 94572
## Draft Post Closure Permit for Land Treatment Area

The California Environmental Protection Agency Department of Toxic Substances Control (DTSC) invites you to review and comment on the draft Hazardous Waste Post-Closure Facility Permit for the former Land Treatment Area (LTA) at the Phillips 66 Company, San Francisco Refinery, located at 1380 San Pablo Avenue, Rodeo, California, 94572.

### Site Description and History

The Land Treatment Area (LTA) is located in an undeveloped area in the southern portion of the Facility property. The entire LTA occupies approximately 8.2 acres, of which 6.4 acres were used for land treatment of oily sludge and other oil refining wastes generated at the SFR between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches.




### Why is a Post-Closure Permit Needed?

This is the Post-Closure Permit Renewal for the LTA. The permit is required to make sure the LTA is safely maintained and groundwater wells are monitored to prevent releases of contamination. Each Permit lasts for 10 years. The San Francisco Regional Water Quality Control Board is overseeing the cleanup of soil and groundwater contamination at the Phillips 66 San Francisco Refinery.

## PUBLIC MEETING

**You are invited to learn more about this Draft Post-Closure Permit at a public meeting:**

**Wednesday, Sept. 21, 2016**
**Rodeo Senior Citizen Center**
**189 Parker Avenue**
**Rodeo, California, 94572**
**Open House: 6:00-6:30pm**
**Presentation: 6:30-7:30pm**

**Public Comment Period**
**September 6---October 24, 2016**

All comments will be considered before a decision is made. Comments must be postmarked, emailed or faxed by **October 24. 2016** to:

**Mike Eshaghian**
**DTSC Project Manager**
**9211 Oakdale Avenue**
**Chatsworth, CA 91311**
**Mike. Eshaghian@dtsc.ca.gov**
**Office: (818) 717-6679**
**Fax: (818) 717-6631**

Documents about this site and the draft Post-Closure Permit are available at the repositories on the back.

www.calepa.ca.gov www.dtsc.ca.gov www.ca.gov

HEARING IMPAIRED INDIVIDUALS may use the California Relay Service at 1-888-877-5378 (TDD)

**What Happens During a Post-Closure Permit?**

DTSC oversees the permit and conducts inspections. The LTA and the vegetation cover are checked and repaired if needed. Groundwater wells and soil samples are tested for chemicals. The wells are repaired and replaced as needed. The LTA is fenced and caution signs are posted according to law. Reports with all test results are provided to DTSC annually. DTSC reviews the reports to make sure contamination is not released, the wells are maintained, and there is no damage to the cover, fences and other protective features of the LTA.

**California Environmental Quality Act (CEQA)**

In compliance with CEQA, DTSC must evaluate if the Post-Closure Permit may have any significant effect on human health and the environment. In response, DTSC prepared a Notice of Exemption (NOE) which concludes that the re-issuance of the Post-Closure Permit will not have a significant negative effect on human health or the environment.

**Where to Find Project Documents:**

Rodeo Public Library
220 Pacific Avenue
Rodeo, California
(510) 799-2606

Crockett Library - Contra Costa County Library
991 Loring Avenue
Crockett, CA 94525
(510) 787-2345

Department of Toxic Substances Control
Chatsworth Regional Office
9211 Oakdale Avenue
Chatsworth, California 91311
Please call (818) 717-6522 for an appointment

To view project documents, including the Draft Post-Closure Permit, go to DTSC's Envirostor website: **http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD009108705**

**Next Steps**

After the public comment period ends, DTSC will review and evaluate any comments received. After the public comments have been considered, DTSC will issue a Response to Comments (RTC) document. The RTC will be mailed to individuals who submitted a written comment that included an e-mail or postal mailing address. DTSC will then make a final decision on the Post-Closure Permit.

**Enforcement History**

DTSC has only found minor violations of the permit in the past five years. The minor violation was cited in November 2012 for a deficiency in the contingency plan which was corrected on December 2012 and in May 2016 for financial responsibility that was corrected in June 2016. All inspection reports are available at:
**http://www.envirostor.dtsc.ca.gov/public/eerp_profile_report.asp?global_id=3001616**

**Who to Contact at DTSC for More Information:**


| | |
|---|---|
| Mike Eshaghian | Erglae Gomez |
| DTSC Project Manager | DTSC Public Participation |
| 9211 Oakdale Avenue | 9211 Oakdale Avenue |
| Chatsworth, CA 91311 | Chatsworth, CA 91311 |
| Mike.eshaghian@dtsc.ca.gov | Erglae.gomez@dtsc.ca.gov |
| Office: (818) 717-6679 | Office: (818) 717-6567 |
| Fax: (818) 717-6631 | Fax: (818) 717-6575 |


Si prefiere hablar con alguien en español acerca de ésta información, favor de llamar a Ricardo Gonzalez, Departamento de Control de Substancias Tóxicas. El número de teléfono es 818-717-6693.

All of DTSC's public participation documents can be made into an alternate format (i.e. Braille, large print, etc.) in another language as appropriate, in accordance with state and federal law.

# Public Notice

The mission of DTSC is to protect California's people and environment from harmful effects of toxic substances through the restoration of contaminated resources, enforcement, regulation and pollution prevention.

## NOTICE OF 45-DAY PUBLIC COMMENT PERIOD
## September 6, 2016—October 24, 2016
## AND PUBLIC MEETING FOR DRAFT POST-CLOSURE PERMIT
## FOR PHILLIPS 66 COMPANY, SAN FRANCISCO REFINERY
## 1380 SAN PABLO AVENUE, RODEO, CALIFORNIA 94572

**What is being proposed?**
The Department of Toxic Substances Control (DTSC) invites you to comment on a draft Post-Closure Permit for the former Land Treatment Area (LTA) at Phillips 66 Company, San Francisco Refinery, 1380 San Pablo Avenue, Rodeo, California, 94572. DTSC is the state agency responsible for regulating the generation, storage, treatment, and disposal of hazardous waste in California. If approved, the 10-year post-closure permit would require long-term monitoring and maintenance of the LTA.

As part of the permit process, DTSC has performed a review of the proposed draft post-closure permit as required by the California Environmental Quality Act (CEQA). Based on this review, DTSC has determined that the proposed draft permit will not have any significant effects on public health or the environment. DTSC proposes to issue a CEQA Notice of Exemption in connection with this project. **The public comment period will run from September 6, 2016 through October 24, 2016.** Written comments must be postmarked or emailed by **October 24, 2016** and sent to: Mike Eshaghian, Project Manager, 9211 Oakdale Avenue, Chatsworth, California 91311, Mike.Eshaghian@dtsc.ca.gov.

**Public Meeting will be held from 6:00 pm to 7:30 pm on Wednesday, September 21, 2016 at Rodeo Senior Citizen Center, 189 Parker Avenue, Rodeo, California, 94572.**

**Where do I get more information?**
The post-closure permit application, draft permit, and related documents can be viewed the following locations:

**Rodeo Public Library**

220 Pacific Avenue
Rodeo, California 94572
(510) 799-2606
Monday: 11AM-5PM
Tues. & Thurs.: 1PM-7PM
Wednesday & Friday: Closed
Saturday: 12PM-5PM

**Contra Costa County Library Crockett Library**

991 Loring Ave
Crockett, California 94525
(510) 787-2345
Monday 2-8PM
Tues. & Thurs.: Closed
Wednesday & Friday: 11AM–5PM
Saturday: 10AM–4PM

**Department of Toxic Substances Control**

9211 Oakdale Avenue
Chatsworth, California 91311
818-717-6522 (Call for Appointment)
Monday-Friday 8AM-3PM

Or visit the DTSC EnviroStor website at: http://www.envirostor.dtsc.ca.gov/public or at http://www.envirostor.dtsc.ca.gov/public/hwmp_profile_report.asp?global_id=CAD009108705

FOR ADDITIONAL INFORMATION: If you have any questions or wish to discuss the proposed plan please contact:

For the project:
Mike Eshaghian
DTSC Project Manager
(818) 717-6679
Mike.eshaghian@dtsc.ca.gov

For Public Participation:
Erglae Gomez
DTSC Public Participation Specialist
(818) 717-6567
Erglae.gomez@dtsc.ca.gov

Cal/EPA DTSC State of California

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**Cc:** Eshaghian, Mike@DTSC[Mike.Eshaghian@dtsc.ca.gov]; Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Mon 7/11/2016 10:32:00 PM
**Subject:** Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area
Final P66 San Francisco Draft Post Closure Permit 7-11-2016.docx

Hi Mr. Zabaneh,

I hope all is well. It has been a while since we have been in touch. I have attached a copy of the Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area. I understand that EPA also review our permits. Please let me know if you have any questions or comments. Thanks.

# California Environmental Protection Agency
# Department of Toxic Substances Control
# DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

Facility EPA ID Number:
CAD009108705

Effective Date:

Expiration Date:

**Facility Name:**
Phillips 66 Company
San Francisco Refinery
1380 San Pablo Avenue
Rodeo, California 94572

**Owner Name:**
Phillips 66 Company
P.O. Box 4428
Houston, Texas 77210

**Operator Name:**
Phillips 66 Company
1380 San Pablo Avenue
Rodeo, California 94572

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Post Closure Facility Permit is hereby issued to: Phillips 66 Company

The Issuance of this Permit is subject to the terms and conditions set forth in the Approved Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015. The Permit consists of 35 pages including Figures 1, 2, 3 and 4 and Exhibit A (Tables 7-2, 7-3, 8-1, 8-2, 8-3, 8-4) of this Permit and Tables G-1, G-2, G-3 of Appendix G of the Approved Application.

_____
Phil Blum, P.E.
Office of Permitting
Department of Toxic Substances Control
Date: _____

**PHILLIPS 66 COMPANY, SAN FRANCISCO REFINERY**
**1380 SAN PABLO AVENUE, RODEO, CALIFORNIA 94572**
**EPA ID NUMBER CAD009108705**
**DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT**
**LAND TREATMENT AREA**

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. **Owner of Facility**
   Phillips 66 Company
   P.O. Box 4428
   Houston, Texas 77210

2. **Owner of Real Property**
   Phillips 66 Company
   P.O. Box 4428
   Houston, Texas 77210

3. **Operator of Facility**
   Phillips 66 Company
   1380 San Pablo Avenue
   Rodeo, California 94572

4. **Location**

   The Phillips 66 Company San Francisco Refinery (the Facility) is an oil refinery located at 1380 San Pablo Avenue, Rodeo, California. A map showing the location of the Facility relative to its surrounding features is included as Figure 1. The Facility is an approximately 1,100-acre oil refinery including a 495-acre industrial area where the refining facilities and equipment are located. The remaining 605 acres are undeveloped lands. The Facility is located on the eastern shore of San Pablo Bay in Contra Costa County, California, north of the community of Rodeo. The Facility is mostly contained within a northwest-southeast trending valley commonly known as the Central Valley, and the accompanying ridge to the northeast which is referred to as Tormey Ridge. The Facility is intersected by the Interstate 80 (I-80) freeway.

   The Land Treatment Area (LTA) is located in an undeveloped area in the southern portion of the Facility property. It is also identified as a small portion of County of Contra Costa Assessor's Parcel Number 358-010-008. The entire LTA occupies approximately 8.2 acres, of which 6.38 acres were used for land treatment of oily sludge and other wastes generated at the Facility between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches. See Figure 2. A legal description of the property is included within Appendix B of the Approved Application.

5. **Description of Facility Operations**

   Petroleum refining operations began at this site in 1896. Currently, the refinery is permitted to process up to 117,000 barrels per day of feed at its crude processing units into a variety of products including butane, several grades of gasoline, diesel

fuel, jet fuel, fuel oil, petroleum coke, and sulfur. The Permittee receives crude oil and other feedstocks by vessels (ships and barges), trucks and pipelines. The Permittee delivers refined products to customers via tanker barge, rail cars, trucks, and pipelines. USEPA classifies the Facility in its current configuration as a Subcategory B (Cracking) refinery, according to the definition provided in 40 CFR §419.40.

From November 1975 until January 1983, Unocal Corporation (Unocal), a previous owner/operator, managed several oily waste streams at the LTA, including materials classified by EPA and DTSC as hazardous wastes under the federal Resource Conservation and Recovery Act (RCRA). All wastes received at the LTA during its operating life were generated at the Facility and were associated with Unocal's petroleum refining operations. The LTA ceased receiving waste in 1983, was formally closed in 1989, and has been in post-closure care since that time.

## 6. Facility History

The Facility is currently owned and operated by Phillips 66 Company. The Facility was operated by Unocal Corporation and its predecessors (principally Union Oil Company of California) from its inception until April 1997, when it was purchased by Tosco Corporation (Tosco).

Tosco was acquired by Phillips Petroleum Company (Phillips) on September 14, 2001. On August 30, 2002, Phillips and Conoco Inc. (Conoco) entered into a transaction in which ConocoPhillips, a Delaware Corp. publicly traded on the NYSE under the symbol COP, became the parent corporation and owner of all of the outstanding common stock of Phillips and Conoco. Both Phillips and Conoco survived the consummation of the above transaction as wholly-owned subsidiaries of ConocoPhillips. Tosco was also, on the date of that transaction, still a wholly-owned subsidiary of Phillips. On December 31, 2002, Phillips changed its name to ConocoPhillips Company. On December 31, 2002, immediately after giving effect to the above-referenced name change, Conoco merged with and into ConocoPhillips Company, with ConocoPhillips Company being the surviving entity. On January 1, 2003, Tosco merged with and into ConocoPhillips Company with ConocoPhillips Company being the surviving entity.

On April 26, 2012 ownership and operation of the San Francisco Refinery was transferred from ConocoPhillips Company to its wholly-owned subsidiary at that time, Phillips 66 Company. On May 1, 2012, ConocoPhillips, which wholly-owned its operating subsidiary ConocoPhillips Company, spun-off its refinery assets and operations to Phillips 66 and Phillips 66 Company became a direct and wholly-owned operating subsidiary of Phillips 66. Phillips 66 Company incorporated in Delaware on November 10, 2011.

The LTA was constructed in two phases between November 1975 and February 1976, and last received hazardous waste in January 1983. Unocal Corporation (Unocal), a previous owner and operator of the Facility, prepared a Closure Plan for the LTA in April 1988. The Plan was revised and subsequently approved by the California Department of Health Services (DHS) (predecessor to DTSC) and the U.S. Environmental Protection Agency (EPA) on July 1, 1988 and August 2, 1988, respectively.

Closure activities were completed on October 15, 1989, and Unocal submitted the required closure certifications to DHS on December 5, 1989. DHS acknowledged acceptance of the LTA closure certification documents in a letter to Unocal dated December 27, 1989. Subsequently, in June 1990, Unocal submitted a hazardous waste facility Post-Closure Permit application for the LTA to the U.S. EPA. U.S. EPA issued the Post-Closure Permit with an effective date of August 12, 1991 which expired on August 12, 2001.

In June 2003, a Part A and Part B application was submitted by ConocoPhillips Company for post-closure care of the Facility. DTSC issued the Post Closure Permit for the LTA with an effective date of April 15, 2004.

On October 26, 2005, DTSC acknowledged closure certification for the Bulk Container Storage Unit. The Permittee continues to store hazardous waste in the Bulk Container Storage Unit for a period of ninety (90) days under its generator status.

On August 2, 2012, DTSC acknowledged closure certification for the Former Container Storage Unit.

DTSC issued a new Post Closure Permit for the Primary Basin with an effective date of February 21, 2012. On December 12, 2012, DTSC granted two separate Class 1* Permit Modifications for both the Primary Basin and the Land Treatment Area to Phillips 66 Company due to the new ownership that became effective in May 2012.

## 7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility's LTA shall be deemed to have started from the effective date of this Post Closure Permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

## 8. Post-Closure Closure Cost Estimate

The Post Closure Cost Estimate approved by DTSC is $1,516,763 (in 2014 dollars).

## PART III. GENERAL CONDITIONS

1. Permit Application Documents

The Part "A" Application dated July 10, 2015 and the DTSC-approved Post Closure Permit Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015 (Approved Application) are hereby made a part of this Permit by reference.

2. Effect of Permit

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility's LTA.

(b) The Permittee is permitted to operate, monitor and maintain this Facility's LTA post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes at the Land Treatment Area not specifically authorized in this Permit or otherwise authorized by DTSC is strictly prohibited.

(c) Compliance with the terms and conditions of this Permit does not constitute a complete defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., title 22, §66270.43).

(g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards (RWQCB) and any conditions imposed pursuant to section 13227 of the Water Code.

3. Compliance with California Environmental Quality Act (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in title 14, California Code of Regulations, section 15070 et seq.

4. Environmental Monitoring

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6.

(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility's LTA are those described in in Section 8 and Appendix G of the Approved Application.

(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility's LTA is described in Section 8 and in Appendix G of the Approved Application.

(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility's LTA are described in Sections 3.2.3 of Appendix G of the Approved Application. During future sampling events, if the Permittee finds constituents listed in title 22 California Code of Regulations, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Permittee shall add them to the list of COCs in Appendix G. Table 8-2, 8-3 and 8-4 as well as Table G-2 and G-3 of Appendix G of the Approved Application provides soil and groundwater monitoring program, analytical summary and frequency of sampling (see Exhibit A).

(d) For the purpose of California Code of Regulations, title 22, section 66264.94, the Concentration Limits for the Facility is described in section 8.10 and Table 8.4 of the Approved Application (see Exhibit A).

(e) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility's LTA are described in Sections 7.2.1.8, 8.7 and Sections 2 and 3 of Appendix G of the Approved Application. Also see Tables 8-2, and 8-3 of the Approved Application (see Exhibit A).

(f) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility's LTA shall be 30 years beginning with the date of the issuance of the post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

(g) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in sections 2.2.5 and 3.2.6 of Appendix G of the Approved Application.

(g) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility's LTA is described in section 7.2.1.8 and Appendix G of the Approved Application. Permittee shall submit a post closure annual soil and groundwater monitoring report after each annual soil and groundwater monitoring and sampling event to DTSC.

(h) The Permittee shall comply with the requirements of the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order-or requirement by the RWQCB. A copy of all semi-annual and annual groundwater monitoring reports (facility-wide) submitted to the RWQCB shall also be submitted to DTSC simultaneously.

5. <u>Annual Hazardous Waste Reduction and Minimization Certification</u>

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).

6. Access

(a) DTSC, its contractors, employees, agents, and/or any United States Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance of the unit and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit, other than those specified in this Part IV, unless otherwise authorized by DTSC. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of title 22, California Code of Regulations, section 66270.1(c) and other similar, unit-specific regulatory requirements, this Facility has one post closure Hazardous Waste Management Unit (Land Treatment Area) for the purpose of this Permit. Post Closure requirements for the Primary Basin are covered under a separate Permit. The Land Treatment Area is described in detail in the Approved Application and is as follows:

UNIT NAME:

Land Treatment Area (LTA)

LOCATION:

The LTA is located in an undeveloped area in the southern portion of the Facility property. The LTA is within the fence line of the Facility and is part of a “buffer zone” that separates the operating areas of the facility from neighboring properties. The LTA is located within an area zoned as heavy industrial. The community of Rodeo is situated west of the LTA and is zoned for a mixture of residential, business, and commercial uses. The 2010 census indicated that there were 3,137 dwelling units and a population of 8,679 persons in Rodeo. The closest residential area is approximately one-half mile south of the LTA. Areas to the east and north of the LTA are zoned for agricultural use, and are primarily pasture for grazing cattle and horses. The entire LTA occupies approximately 8.2 acres, of which 6.4 acres were used for land treatment of oily sludge and other wastes generated at the Facility between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches.

The LTA consists of a fairly level area with an average elevation of 170 feet above mean sea level. Most of the down slope portion of the LTA is underlain with approximately 40 feet of fill material. The hills surrounding the valley that contains the LTA attain a maximum elevation of approximately 740 feet above mean sea level. The valley is drained by a small, unnamed stream that flows to the northwest through the Facility property and into San Pablo Bay.

ACTIVITY TYPE:

Conduct post closure activities, groundwater monitoring, soil sampling, inspection and maintenance of wells and cap/vegetative cover.

ACTIVITY DESCRIPTION:

Annual soil monitoring program including six target locations (one location within each of the four quadrants of the LTA and two locations corresponding to low points in the LTA where water has historically ponded during significant rain events) are selected for the soil monitoring, with subsequent soil sample locations in future sampling events located within a 10 foot radius of the target locations (see attached Figures 2 and 3). Each of the six sample locations will be surveyed to establish documented location information. A surveyor will be used to re-locate the target sample locations in subsequent soil sampling events.

Based on the known subsurface conditions of the vadose zone, it is assumed that soil samples collected from within a 10-foot radius of the target sample locations would represent similar subsurface soil conditions. The annual soil monitoring program including proposed sample locations, sampling schedule, constituents of concern, sampling methodology, and data evaluation procedures for the LTA is described in section 2 of Appendix G and the soil monitoring analytical summary shown in Table G-1 of Appendix G of the Approved Application. The annual soil sampling will be conducted during the same general time period as the annual groundwater sampling.

Based on the consistent groundwater flow direction towards the southwest, groundwater samples will be collected annually from one background well (PZ-2R-1) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). All wells at the LTA (PZ-2R-1, VMW-11, PCW-12, PCW-13, PCW-14, PCW-15, CW-16, CW-17 and CW-18) will be gauged as well.

Groundwater quality samples will be collected annually from the one background well at three different elevations (PZ-2R-1, PZ-2R, or PZ-2RD) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). The background well location consists of three collocated piezometers completed at different depths (PZ-2R-1, PZ-2R, and PZ-2RD, listed in increasing completion depth) to account for seasonal groundwater fluctuations (i.e., the shallowest piezometer was occasionally dry). The shallowest of the three piezometers where water is encountered will be gauged/sampled as the background well. Annual well sampling is considered appropriate due to the stability of the groundwater conditions at the LTA. The annual groundwater monitoring program including proposed sample locations, sampling schedule, constituents of concern, sampling methodology, and data evaluation procedures for the LTA is described in section 3 of Appendix G and groundwater program analytical summary shown in Table G-3 of Appendix G of the Approved Application. The annual soil sampling will be conducted during the same general time period as the annual groundwater sampling. The groundwater gauging and sampling frequency summary is shown on Table G-2 of Appendix G of the Approved Application. Table 8-1, 8-2, 8-3 and 8-4

as well as Table G-1, G-2 and G-3 of Appendix G of the Approved Application provides soil and groundwater monitoring program, analytical summary and frequency of sampling (see Exhibit A).

The vegetative cover of native grasses established on the surface of the LTA is maintained to minimize wind and rain erosion of the clean soil cap placed over the treatment zone. This is required to comply with California Code of Regulations, title 22, §§66264.280(c)(3) and 66264.280(c)(5). In addition, bare spots that develop in the vegetative cover during the post-closure period are replanted with appropriate plant species when discovered and as weather conditions permit. Burrow holes observed in the cover not covered with plant growth will be filled with imported soil. Inspection checklist for the LTA and monitoring wells are listed in Appendix E of the Approved Application. Table 7-2 and 7-3 of the Approved Application provides LTA Maintenance and Inspection Requirements.(see Exhibit A). The annual reports of soil and groundwater monitoring and inspections shall be submitted to DTSC by March 1 annually.

PHYSICAL DESCRIPTION:

The LTA is constructed on engineered fill. The treatment zone is contained horizontally on northern, eastern and southern sides by dikes of clayey fill and on the western side by a natural bedrock height. Vertically, the treatment zone extends to between 1 foot and 2 feet below grade over most of the LTA, and to 3.8 feet below grade in the southwestern corner. Most of the treatment zone is underlain by fill material comprised of silt and sandy clay. A narrow strip on the western side of the LTA that abuts a natural topographic height is the only portion of the treatment zone that is in contact with bedrock materials.

Direct precipitation during particularly wet winters tends to accumulate in the down slope portions on both the eastern and western sides of the LTA. In the summer of 1986, a drainpipe was installed in the dike between the two sides of the LTA to allow the eastern side to drain to the western side by gravity. The dike was recompacted to ensure its structural integrity. The western side of the LTA has always been drained by a pump, which transfers rainwater by pipeline to the process sewer and ultimately to the Facility's NPDES-regulated wastewater treatment facilities.

The LTA does not have a liner but does have a cap that consists of six inches of clean soil and a vegetative cover (CAP) that were placed over the surface of the LTA after completion of active treatment.

MAXIMUM CAPACITY:

The LTA treated about 23,460 tons of waste material during its active life.

WASTE SOURCES:

From construction of the LTA until April 1979, the wastes treated in the unit totaled approximately 3,950 tons and consisted mainly of Dissolved Air Flotation (DAF) float (EPA Waste Number K048) and storm basin sediment from the Facility's wastewater treatment plant. Between April 1979 and January 1983, an estimated total of 17,900 tons of material was treated at the LTA, including seven major waste types: storm basin sediment from the Facility's wastewater treatment plant; DAF float; slop oil tank solids; API separator sludge; emulsion breaking tank waste; asphalt solvent tank waste; cracked naphtha tank waste, as well as various miscellaneous oily sludges and other hazardous and non-hazardous wastes. In addition, plant records indicate that 2,150 barrels (360 tons) of crude oil bottom sediments from Tank 154 were applied to the eastern side of the LTA, and 8,500 barrels (1,430 tons) of unspecified oily wastes were applied to both the eastern and western sides of the LTA.

WASTE TYPES:

The identified hazardous wastes managed in this unit can be classified into seven main types: storm basin sediment, DAF float, slop oil tank solids, API separator sludge, emulsion breaking tank waste, asphalt solvent tank waste, cracked naphtha tank waste. In addition, various miscellaneous oily sludges and other hazardous and non-hazardous wastes, crude oil bottom tank sediments and unspecified oily wastes were applied to LTA.

RCRA WASTE CODES:

Listed hazardous wastes applied to the LTA, and their associated waste codes provided in 40 Code of Federal Regulations, section 261.32, included DAF float (EPA Waste Number K048), slop oil emulsion solids (EPA Waste Number K049), and API separator sludge (EPA Waste Number K051). The Refinery wastes and the quantity of the wastes that were disposed of to the LTA between April 1979 and January 1983 are listed in the Appendix A of the approved Permit Application.

## PART V. SPECIAL CONDITIONS

1. The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1 and shall include the monitoring and response program data in an annual report.

2. The Permittee shall conduct inspection, visual monitoring, and maintenance during the post closure care period as described in Section 7 and 8 and Appendices E and G of the Approved Application. The inspection and maintenance report shall be included in the Annual Report submitted to DTSC.

3. The Permittee shall monitor the groundwater in accordance with the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order and in accordance with Section 8 and Appendix G of the Approved Application. The Permittee shall simultaneously submit to DTSC a copy of the semi-annual and annual groundwater monitoring reports required by the RWQCB.

4. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application and by California Regional Water Quality Control Board San Francisco Bay Region Order (Order) issued to the Facility in November 2015 and any other future order or requirement by the RWQCB.

5. Groundwater samples shall be collected and analyzed as required in the Approved Application from one background well (PZ-2R-1) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). Additionally, once every five years, each of the compliance monitoring wells shall be sampled and analyzed for the constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX. All wells at the LTA (PZ-2R-1, VMW-11, PCW-12, PCW-13, PCW-14, PCW-15, CW-16, CW-17 and CW-18) shall be gauged as well. The annual reports of soil and groundwater monitoring and inspections shall be submitted to DTSC by March 1 annually.

6. Soil samples shall be collected and analyzed as required in section 2 of Appendix G of the Approved Application. Also see Table 8-1 as well as Table G-1 of Appendix G of the Approved Application.

7. The Permittee shall comply with section 66264.280(c) and shall inspect the

vegetative cover to make sure the bare spots that develop in the vegetative cover during the post-closure period are replanted with appropriate plant species when discovered and as weather conditions permit. Burrow holes observed in the cover not covered with plant growth shall be filled with imported soil or sealed with bentonite cement slurry. See Section 7.2.1.4 and Tables 7-2 and 7-3 of the approved Application.

8. Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 90 days of the effective date of this Permit, the Permittee shall submit a proposed Land Use Covenant to DTSC for review and approval. Upon final approval and execution by DTSC and Permittee, Permittee shall, within 180 days, have the fully executed Land Use Covenant recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement to: Department of Toxics Substances Control, Accounting Unit, P.O. Box 806, Sacramento, California 95812-0806. All payments shall reference the name and address of the Facility.

8. DTSC may request additional Monitoring if new data indicates downward migration of contamination to soil and/or groundwater from the regulated unit.

# PART VI. CORRECTIVE ACTION

## A. SUMMARY OF THE CORRECTIVE ACTION AND GROUNDWATER REMEDIATION

Based on the findings of a RCRA Facility Assessment on February 24, 1989, the U.S. EPA issued an Administrative Order (EPA Docket No. RCRA 09-89-0012) under RCRA Section 3008(h.) This Administrative Order required investigation and, if necessary, corrective action for releases to the environment from six Solid Waste Management Units (SWMUs) at the Facility. The requirements of the U.S. EPA Order were subsequently modified and incorporated into the 1991 Post-Closure Permit for the Land Treatment Area (LTA).

The California Regional Water Quality Control Board San Francisco Bay Region (RWQCB) has issued a series of Waste Discharge Requirements (WDRs) requiring monitoring for leaks or spills from the refinery's surface impoundments and landfills. The specific requirements for corrective action at the Facility are incorporated in the following Order and any subsequent Order. RWQCB Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order that required investigation and remediation at several areas of concern, as well as maintenance of a perimeter containment and removal system along the San Pablo Bay Shoreline.

### IMPLEMENTED CORRECTIVE ACTION AT AREAS OF CONCERN (AOCS)

A free-phase liquid hydrocarbon (FPLH) recovery program and the following operating recovery systems serve to remediate and control contaminated groundwater and FPLH associated with the AOCs:

1. Interceptor Trench (Alignments A, B, C, and D);
2. B-Zone Extraction System;
3. Tank 302 Area Interceptor Trench (Alignment E);
4. Primary Basin/Main Storm Basin Extraction System;
5. Unit 76 Active Skimming System;
6. Tank 100 Area Interceptor Trench; and,
7. Marine Terminal Groundwater Protection System

These systems and the FPLH recovery program were implemented as part of the overall Groundwater Quality Management Program for the Facility. The Interceptor Trench, B-Zone Extraction System, and Marine Terminal Groundwater Protection System hydraulically

control groundwater near the downgradient perimeter of the Facility. The Primary Basin/Main Storm Basin Extraction System and the Unit 76 Active Skimming System mitigate interior “hot spots” of impacted groundwater.

STATUS OF CORRECTIVE MEASURES

Each corrective measure required by the RWQCB Order has been implemented at the Facility. An evaluation of the effectiveness of each of the corrective measures is provided to the RWQCB on a semi-annual basis, and in an annual summary.

B. CORRECTIVE ACTION CONDITIONS

1. The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the Regional Water Quality Control Board (RWQCB) pursuant to the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order or requirements by the RWQCB or USEPA.

# FIGURES

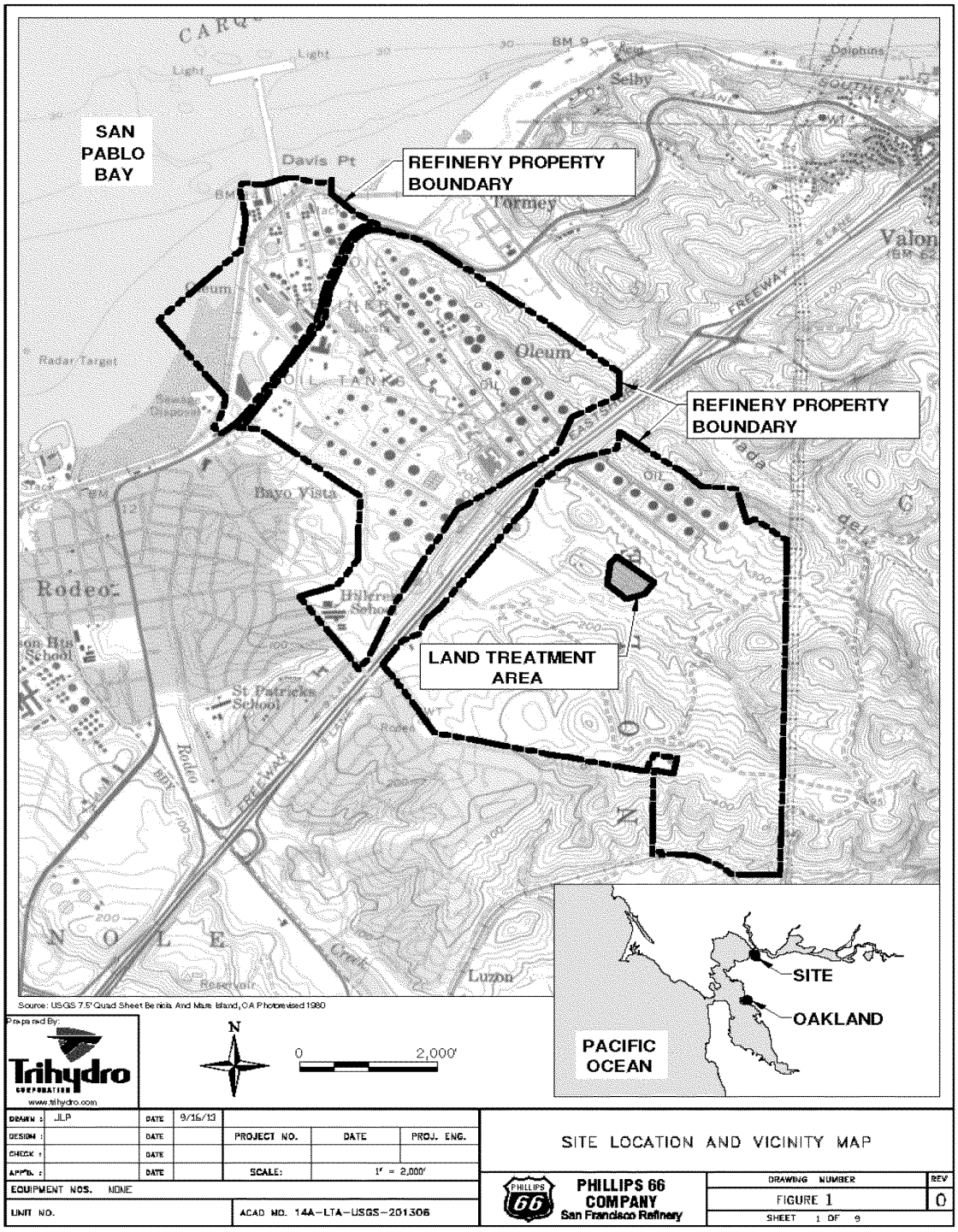


FIGURE 1 – Site Location and Vicinity Map

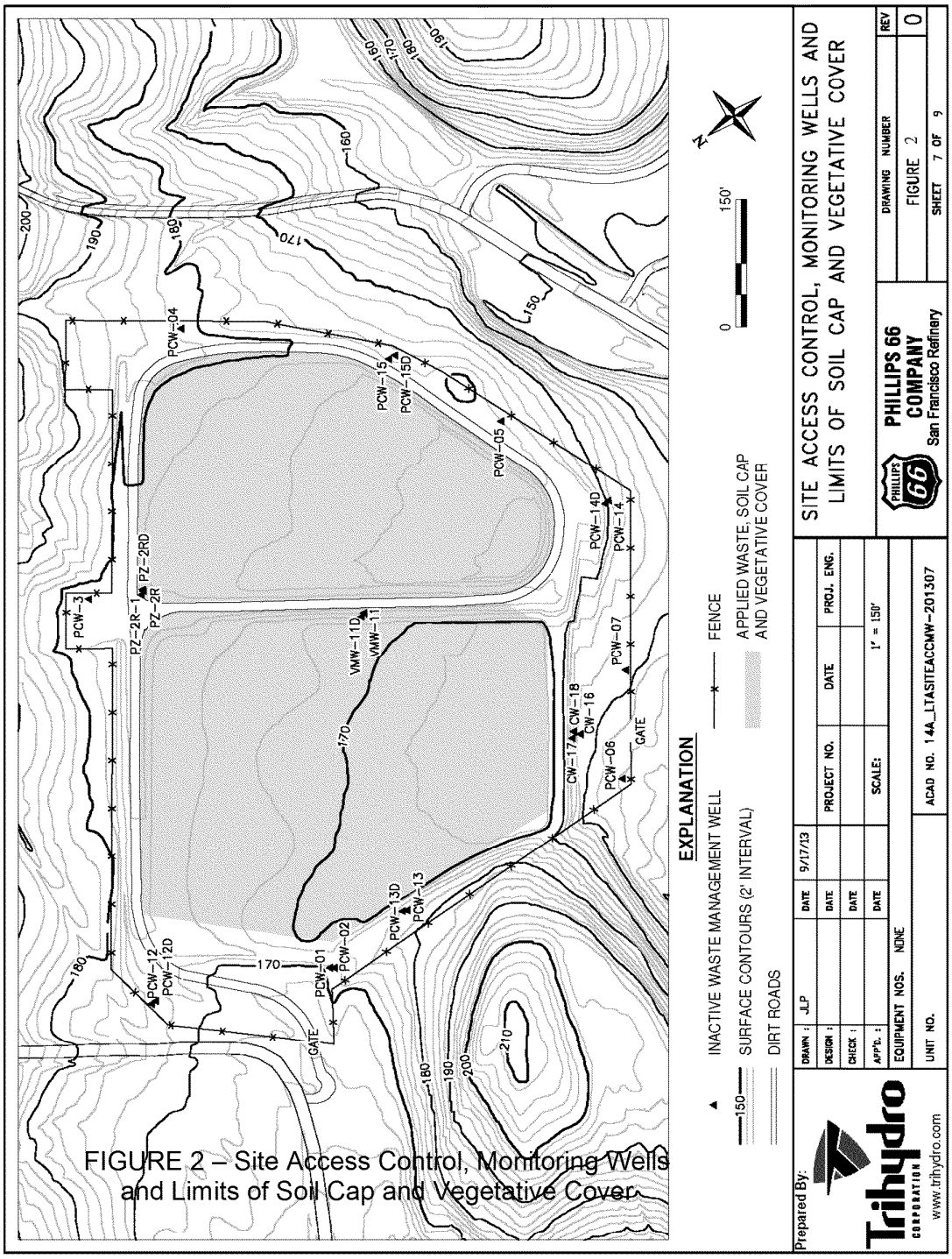


FIGURE 2 – Site Access Control, Monitoring Wells and Limits of Soil Cap and Vegetative Cover

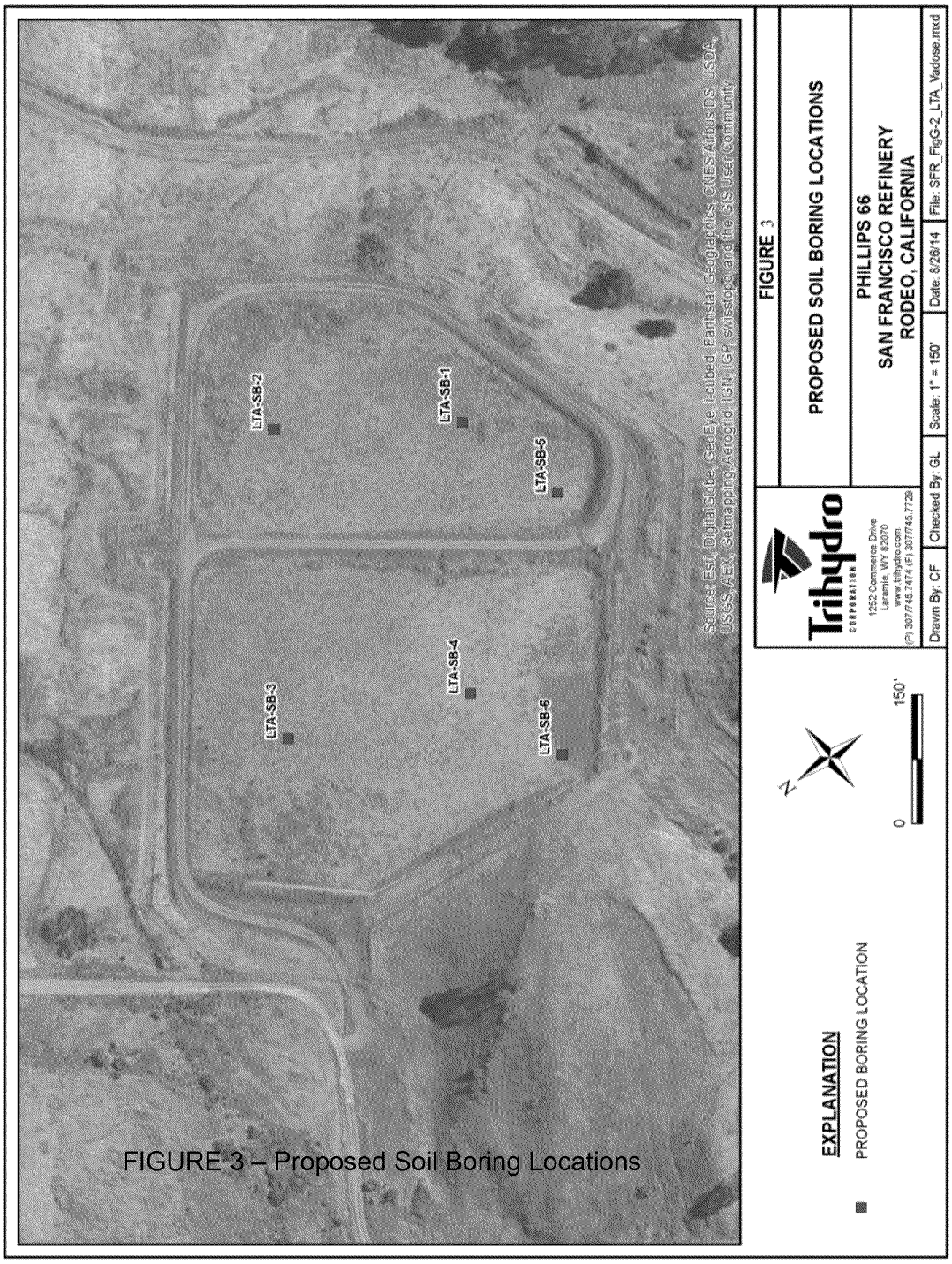


FIGURE 3 – Proposed Soil Boring Locations

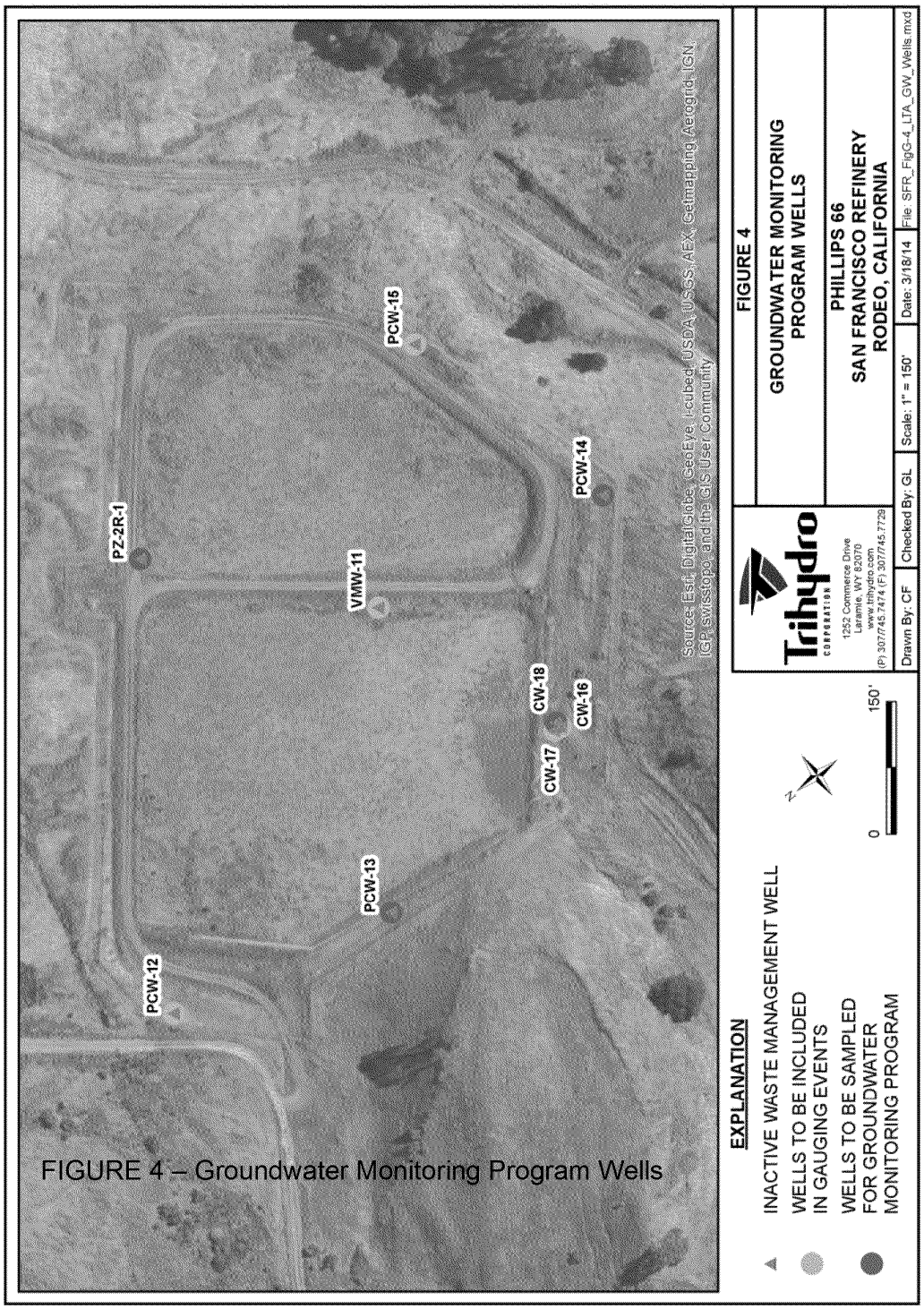


FIGURE 4 – Groundwater Monitoring Program Wells

# EXHIBIT A - Tables

**TABLE 7-2. LTA MAINTENANCE REQUIREMENTS**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Item | Frequency |
|---|---|
| LTA perimeter fence and warning signs | Within 30 days of discovery of need for maintenance. |
| Monitoring wells and piezometers | 1. Minor repairs-within 30 days of discovery of need for maintenance.<br>2. Replacement-after approval by RWQCB and DTSC. |
| Run-on and runoff control systems | 1. Berms-within 30 days of discovery of need for maintenance.<br>2. Pump-September to October of each year and within 30 days of discovery of need for maintenance.<br>3. Pipeline-within 30 days of discovery of need for maintenance. |
| Vegetative cover | Patching-as required and weather permitting. |

**TABLE 7-3. LTA INSPECTION REQUIREMENTS**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Item | Frequency |
|---|---|
| LTA perimeter fence and warning signs | Spring and fall of each year. |
| Monitoring wells and piezometers | Spring and fall of each year. |
| Run-on and runoff control systems | 1. Each October of every year (prior to rainy season).<br>2. First business day after each storm event.<br>3. Monthly from October 1 through May 1 of each year. |
| Vegetative cover | Spring and fall of each year. |

**TABLE 8-1. ANALYTICAL CONSTITUENTS FOR SOIL SAMPLES COLLECTED AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Analytical Method |
|---|---|
| pH | EPA 9045C |
| Total Petroleum Hydrocarbons as Diesel (TPH- D) with Silica Gel Cleanup | EPA 3630C/ EPA 8015M |
| Total Petroleum Hydrocarbons as Gasoline (TPH-G) | EPA 8260B |
| Total Oil and Grease (TOG) | EPA 1664HE |
| Chromium | EPA 6010B |
| Mercury | EPA 7471 |
| Lead | EPA 6010B |
| Nickel | EPA 6010B |
| Selenium | EPA 6010B |
| Vanadium | EPA 6010B |
| Zinc | EPA 6010B |
| Total Kjeldahl Nitrogen (TKN) | EPA 351.2M |
| Volatile Organic Compounds (VOCs) | EPA 8260B[a] |
| Semi-Volatile Organic Compounds (SVOCs) | EPA 8270C[a] |

a As outlined in the June 1990 RCRA Post-Closure Permit Application (Brown and Caldwell, June 1990) and incorporated into the June 28, 1991 Post-Closure Permit and the April 15, 2004 Post-Closure Permit by reference. Samples collected from the boring with the highest TOG concentrations are to be analyzed for VOCs and SVOCs.

**TABLE 8-2. MONITORING WELLS SAMPLED DURING POST-CLOSURE AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Description/Location |
|---|---|
| PZ-2R | Upgradient well for LTA. Monitors shallow groundwater zone for background concentrations of hazardous waste constituents. |
| VMW-11 | Located within southwest portion of LTA, monitors shallow groundwater directly beneath the treatment area. |
| PCW-12 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-13 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-14 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-15 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| CW-16 | Deep well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater in relatively unweathered bedrock. |
| CW-17 | Intermediate-depth well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring across the fill/bedrock contact and in the lower portion of the fill interval. |
| CW-18 | Shallow well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring in the fill material overlying the drainage channel. |

**TABLE 8-3. ANALYTICAL METHODS FOR GROUNDWATER SAMPLES FROM MONITORING WELLS AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Analytical Method |
|---|---|
| pH | EPA 9040 |
| Specific conductance | EPA 120.1 |
| Chromium | EPA 6010B |
| Nickel, vanadium and zinc | EPA 6010B |
| Selenium | EPA 6010B |
| Lead | EPA 6010B |
| Mercury | EPA 7470A |
| Total dissolved solids (TDS) | EPA 160.1 |
| Volatile organic compounds (VOCs) | EPA 8260B |
| Semi-volatile organic compounds (SVOCs) | EPA 8270C |

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Total Petroleum Hydrocarbons (TPH) as gasoline | 50 ug/L | PQL | 0.2 mg/kg | PQL |
| Total Petroleum Hydrocarbons (TPH) as diesel (with silica gel) | 50 ug/L | PQL | 2 mg/kg | PQL |
| Total oil and grease (TOG) | 5 mg/L | PQL | 50 mg/kg | PQL |
| Chromium | 0.05 mg/L | MCL | 160 mg/kg | LBNL, 2009 [c] |
| Mercury | 0.002 mg/L | MCL | 0.2 mg/kg | LBNL, 2009 [c] |
| Lead | 0.0524 mg/L | 95% UCL[a] | 48 mg/kg | LBNL, 2009 [c] |
| Nickel | 0.1 mg/L | MCL | 55 mg/kg | LBNL, 2009 [c] |
| Selenium | 0.05 mg/L | MCL | 1.1 mg/kg | LBNL, 2009 [c] |
| Vanadium | 0.003 mg/L | PQL (no MCL available) | 230 mg/kg | LBNL, 2009 [c] |
| Zinc | 0.01 mg/L | PQL (no MCL available) | 150 mg/kg | LBNL, 2009 [c] |
| Volatile Organic Compounds (VOCs) | | | | |
| Benzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromochloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromodichoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromoform | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromomethane | 1 ug/L | PQL | 0.005 mg/kg | PQL |
| n-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| sec-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| tert-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Carbon Tetrachloride | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloroform | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 2-Chlorotoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 4-Chlorotoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dibromochloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dibromo-3-chloropropane | 1.0 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dibromoethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dibromomethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,3-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,4-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dichlorodifluoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1-Dichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |



**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Volatile Organic Compounds (VOCs) (continued) | | | | |
| cis-1,2-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| trans-1,2-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Ethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Hexachlorobutadiene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Isopropylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| p-Isopropyltoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Methylene chloride | 1 ug/L | PQL | 0.01 mg/kg | PQL |
| Methyl tert-butyl ether | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Naphthalene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Styrene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2,2-Tetrachloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Tetrachloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Toluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,3-Trichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,4-Trichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,1-Trichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2-Trichoroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Trichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Trichlorofluoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,3-Trichloropropane | 1 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2-Trichloro-1,2,2-trichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,4-Trimethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,3,5-Trimethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Vinyl chloride | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Total Xylenes | 1 ug/L | PQL | 0.01 mg/kg | PQL |
| p- & m-Xylenes | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| o-Xylene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Semi-Volatile Organic Compounds (SVOCs) | | | | |
| Acenapththene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Acenapthylene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Aldrin | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Aniline | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| Anthracene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzidine | 20 ug/L | PQL | 3 mg/kg | PQL |
| Benzo(a)anthracene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(b)fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(k)fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(a)pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(g,h,i)perylene | 2 ug/L | PQL | 0.1 mg/kg | PQL |

2 of 4

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Semi-Volatile Organic Compounds (SVOCs) (continued) | | | | |
| Benzoic acid | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| Benzyl alcohol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzyl butyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| alpha-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| beta-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| delta-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| gamma-BHC (Lindane) | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethoxy) methane | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethoxy) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethyl) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroisopropyl) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Ethylhexyl) phthalate | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 4-Bromophenyl phenyl ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chloroaniline | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Chloronaphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chlorophenyl phenyl ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Chrysene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,4'-DDE | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,4'-DDT | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Dibenzo(a,h)anthracene | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Dibenzofuran | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2-Dichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,3-Dichorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,4-Dichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3,3-Dichlorobenzidine | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Dieldrin | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Diethylphthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Dimethyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Di-n-butyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dinitrotoluene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,6-Dinitrotoluene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Di-n-octyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2-Diphenylhydrazine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Endosulfan I | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Endosulfan II | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Endosulfan sulfate | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Endrin | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| Endrin Aldehyde | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| Fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Fluorene | 2 ug/L | PQL | 0.1 mg/kg | PQL |



**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Semi-Volatile Organic Compounds (SVOCs) (continued) | | | | |
| Heptachlor | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Heptachlor epoxide | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Hexachlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Hexachlorobutadiene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Indeno(1,2,3-CD)pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Isophorone | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Methylnaphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Naphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Naphthylamine | 20 ug/L | PQL | 3 mg/kg | PQL |
| 2-Nitroaniline | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3-Nitroaniline | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| 4-Nitroaniline | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| Nitrobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitrosodimethylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitroso-N-propylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitrosodiphenylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Phenanthrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2,4-Trichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chloro-3-methylphenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 2-Chlorophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dichlorophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dimethylphenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,6-Dinitro-2-methlyphenol | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| 2,4-Dinitrophenol | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| 2-Methylphenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3- & 4-Methylphenol | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| 2-Nitrophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Nitrophenol | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| Pentachlorophenol | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| 2,4,5-Trichlorophenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 2,4,6-Trichlorophenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |

Notes:

CL - Concentration Limit

MCL - Maximum Contaminant Level http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.shtml (accessed 1-15-15)

PQL - Practical Quantitation Limit, as established by California certified analytical laboratory for test methods included in Table 7-1 and 7-3.

[a] Background concentration for metals in groundwater calculated by computing the mean and determining a 95% upper confidence limit based on data from upgradient well PZ-2R.

[b] Proposed Vadose Soil CLs are only applicable to samples collected below the treatment zone and are not applicable to those collected within the LTA.

[c] Lawrence Berkeley National Laboratory (LBNL). 2009. Analysis of Background Distribution of Metals in the Soil at Lawrence Berkeley National Laboratory. Revised. Values used are the Upper Estimate of Regional Background Values (Table 4 of Report), based on Shacklette and Boerengen (1984) for the western conterminous United States.



**TABLE G-1. SOIL MONITORING PROGRAM ANALYTICAL SUMMARY**
**LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Location | Chromium, Lead, Mercury, Selenium, Vanadium and Zinc (EPA Method 6010B/7000 Series) | pH (EPA Method 9040) | Total Petroleum Hydrocarbons as gasoline (EPA Method 8015M/8260B) | Total Petroleum Hydrocarbons as diesel with silica gel (EPA Method 8015M and 3630C) | Total Oil and Grease (EPA Method 1664HE) | Total Kjeldahl Nitrogen (EPA Method 351.4) | Volatile Organic Compounds (EPA Method 8260B) | Semivolatile Organic Compounds (EPA Method 8270C) |
|---|---|---|---|---|---|---|---|---|
| LTA-SB-1 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-2 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-3 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-4 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-5 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-6 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |

Notes:

Sampling Schedule for Annual events are for ten years (2015-2024)

Annual samples are to be collected from within 10 feet of Year 1 sample location and only in the vadose zone.

**TABLE G-2. GROUNDWATER GAUGING AND SAMPLING FREQUENCY SUMMARY**
**LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Description/Location | Groundwater Gauging | Groundwater Sample Collection |
|---|---|---|---|
| PZ-2R-1 | Upgradient well for LTA, located outside of treatment zone. Monitors shallow groundwater zone for background concentrations of hazardous waste constituents. Three wells are co-located but are completed at different depths to account for seasonal groundwater fluctuations - PZ-2 (known as PZ-2R-1) with a total depth of ~38 feet, PZ-2R with a total depth of ~45 feet, and PZ-2RD with a total depth of ~65 feet. The shallowest well where water is encountered will be gauged/sampled. | Annual Measurement | Annual Collection |
| VMW-11 | Located within southwest portion of LTA, monitors shallow groundwater directly beneath the treatment area. | Annual Measurement | NA |
| PCW-12 | Located near northern corner of LTA (cross/up-gradient location) | Annual Measurement | NA |
| PCW-13 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. | Annual Measurement | Annual Collection |
| PCW-14 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. | Annual Measurement | Annual Collection |
| PCW-15 | Located near southern corner of LTA (crossgradient location). | Annual Measurement | NA |
| CW-16 | Deep well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater in relatively unweathered bedrock. | Annual Measurement | NA |
| CW-17 | Intermediate-depth well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring across the fill/bedrock contact and in the lower portion of the fill interval. | Annual Measurement | NA |
| CW-18 | Shallow well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring in the fill material overlying the drainage channel. | Annual Measurement | Annual Collection |

Notes:
LTA - Land Treatment Area
NA - Not Applicable

**TABLE G-3. GROUNDWATER PROGRAM ANALYTICAL SUMMARY**
**LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Dissolved Chromium, Lead, Mercury, Selenium, Vanadium and Zinc (EPA Method 200.8 and 245.1) | pH (EPA Method 150.1) | Total Dissolved Solids (EPA Method 160.1) | Volatile Organic Compounds (EPA Method 8260B) | Semivolatile Organic Compounds (EPA Method 8270C) | Appendix IX List (EPA Method 8260B, 8270C, 8141BG, 8081, 8082, 8151A, 200.8, 245.1, 9010, 9030, and 8280) |
|---|---|---|---|---|---|---|
| PZ-2R-1* | Annual | Annual | Annual | Annual | Annual | 5-Year |
| PCW-13 | Annual | Annual | Annual | Annual | Annual | 5-Year |
| PCW-14 | Annual | Annual | Annual | Annual | Annual | 5-Year |
| CW-18 | Annual | Annual | Annual | Annual | Annual | 5-Year |

Notes:
* = Three wells are co-located at PZ-2 but are completed at different depths to account for seasonal groundwater fluctuations - PZ-2 (known as PZ-2R-1) with a total depth of ~38 feet, PZ-2R with a total depth of ~45 feet, and PZ-2RD with a total depth of ~65 feet. The shallowest well where water is encountered will be sampled.

Sampling Schedule for 30-year events are Annual events from 2015-2045, except for 5-year events which are 2019, 2024, 2029, 2034, 2039, and 2044.

Annual - Indicates analyses except for 5-year events

Appendix IX List is noted in CCR Title 22, Division 4.5, Chapter 14, Article 19. Analytes include volatile organic compounds, semivolatile organic compounds, organophosphorous pesticides, organochlorine pesticides, polychlorinated biphenyls, chlorinated herbicides, dissolved metals, cyanide, sulfide, and 2,3,7,8-tetrachlorodibenzodioxin.

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**Cc:** Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]
**From:** Eshaghian, Mike@DTSC
**Sent:** Tue 8/23/2016 10:44:56 PM
**Subject:** FW: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area
Final P66 San Francisco Draft Post Closure Permit 8-23-2016.docx

Hi Mike,

We are going to public notice the attached Draft Post Closure Permit for Phillips 66 San Francisco Refinery Land Treatment Area on August 29, 2016. The comment period will end on October 14, 2016. I did not receive any comments from EPA. Please let me know ASAP if you have any concerns or comments. Thanks.

**From:** Eshaghian, Mike@DTSC
**Sent:** Tuesday, July 12, 2016 7:31 AM
**To:** Zabaneh, Mahfouz
**Cc:** Blum, Phil@DTSC; Gross, Barbara; Rajagopalan, Latha
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

I am planning to public notice it sometimes in early August. How much time do you need?

**From:** Zabaneh, Mahfouz [mailto:Zabaneh.Mahfouz@epa.gov]
**Sent:** Monday, July 11, 2016 4:28 PM
**To:** Eshaghian, Mike@DTSC
**Cc:** Blum, Phil@DTSC; Gross, Barbara; Rajagopalan, Latha
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mike,

I will pass this permit to my Supervisor, Barbara Gross, and she will assign it to someone to review when she gets back in the office, since I am working on a project with a tight schedule and I won't have time to review it. Barbara is on vacation till 7/18.

How long does EPA have to review this draft post closure permit?

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Eshaghian, Mike@DTSC [mailto:Mike.Eshaghian@dtsc.ca.gov]
**Sent:** Monday, July 11, 2016 3:32 PM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Cc:** Eshaghian, Mike@DTSC <Mike.Eshaghian@dtsc.ca.gov>; Phil.Blum_dtsc.ca.gov <Phil.Blum@dtsc.ca.gov>
**Subject:** Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mr. Zabaneh,

I hope all is well. It has been a while since we have been in touch. I have attached a copy of the Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area. I understand that EPA also review our permits. Please let me know if you have any questions or comments. Thanks.

# California Environmental Protection Agency
# Department of Toxic Substances Control
# DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT

Facility EPA ID Number:
CAD009108705

Effective Date:

Expiration Date:

**Facility Name:**
Phillips 66 Company
San Francisco Refinery
1380 San Pablo Avenue
Rodeo, California 94572

**Owner Name:**
Phillips 66 Company
P.O. Box 4428
Houston, Texas 77210

**Operator Name:**
Phillips 66 Company
1380 San Pablo Avenue
Rodeo, California 94572

Pursuant to California Health and Safety Code section 25200, this Resource Conservation and Recovery Act (RCRA)-equivalent Hazardous Waste Post Closure Facility Permit is hereby issued to: Phillips 66 Company

The Issuance of this Permit is subject to the terms and conditions set forth in the Approved Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015. The Permit consists of 35 pages including Figures 1, 2, 3 and 4 and Exhibit A (Tables 7-2, 7-3, 8-1, 8-2, 8-3, 8-4) of this Permit and Tables G-1, G-2, G-3 of Appendix G of the Approved Application.

_____
Phil Blum, P.E.
Supervising HSE I

Permitting Division
Department of Toxic Substances Control
Date: _____

ATTACHMENT "A"

PHILLIPS 66 COMPANY, SAN FRANCISCO REFINERY
1380 SAN PABLO AVENUE, RODEO, CALIFORNIA 94572
EPA ID NUMBER CAD009108705
DRAFT HAZARDOUS WASTE POST CLOSURE FACILITY PERMIT
LAND TREATMENT AREA

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## PART I. DEFINITIONS

All terms used in this Permit shall have the same meaning as those terms have in the California Health and Safety Code, division 20, chapter 6.5 and California Code of Regulations, title 22, division 4.5, unless expressly provided otherwise by this Permit.

1. **"DTSC"** as used in this Permit means the California Department of Toxic Substances Control.

2. **"Facility"** as used in this Permit means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage resource recovery, disposal or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal or recycling operational units or combinations of these units.

   For the purpose of implementing corrective action under California Code of Regulations, title 22, division 4.5, a hazardous waste facility includes all contiguous property under the control of the owner or operator required to implement corrective action.

3. **"Permittee"** as used in this Permit means the Owner and Operator.

4. **"RCRA"** as used in this Permit means the Resource Conservation and Recovery Act (42 U.S.C. §6901 et seq.).

## PART II. DESCRIPTION OF THE FACILITY AND OWNERSHIP

1. **Owner of Facility**
   Phillips 66 Company
   P.O. Box 4428
   Houston, Texas 77210

2. **Owner of Real Property**
   Phillips 66 Company
   P.O. Box 4428
   Houston, Texas 77210

3. **Operator of Facility**
   Phillips 66 Company
   1380 San Pablo Avenue
   Rodeo, California 94572

4. **Location**

   The Phillips 66 Company San Francisco Refinery (the Facility) is an oil refinery located at 1380 San Pablo Avenue, Rodeo, California. A map showing the location of the Facility relative to its surrounding features is included as Figure 1. The Facility is an approximately 1,100-acre oil refinery including a 495-acre industrial area where the refining facilities and equipment are located. The remaining 605 acres are undeveloped lands. The Facility is located on the eastern shore of San Pablo Bay in Contra Costa County, California, north of the community of Rodeo. The Facility is mostly contained within a northwest-southeast trending valley commonly known as the Central Valley, and the accompanying ridge to the northeast which is referred to as Tormey Ridge. The Facility is intersected by the Interstate 80 (I-80) freeway.

   The Land Treatment Area (LTA) is located in an undeveloped area in the southern portion of the Facility property. It is also identified as a small portion of County of Contra Costa Assessor's Parcel Number 358-010-008. The entire LTA occupies approximately 8.2 acres, of which 6.38 acres were used for land treatment of oily sludge and other wastes generated at the Facility between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches. See Figure 2. A legal description of the property is included within Appendix B of the Approved Application.

5. **Description of Facility Operations**

   Petroleum refining operations began at this site in 1896. Currently, the refinery is permitted to process up to 117,000 barrels per day of feed at its crude processing units into a variety of products including butane, several grades of gasoline, diesel fuel, jet fuel, fuel oil, petroleum coke, and sulfur. The Permittee receives crude oil

and other feedstocks by vessels (ships and barges), trucks and pipelines. The Permittee delivers refined products to customers via tanker barge, rail cars, trucks, and pipelines. USEPA classifies the Facility in its current configuration as a Subcategory B (Cracking) refinery, according to the definition provided in 40 CFR §419.40.

From November 1975 until January 1983, Unocal Corporation (Unocal), a previous owner/operator, managed several oily waste streams at the LTA, including materials classified by EPA and DTSC as hazardous wastes under the federal Resource Conservation and Recovery Act (RCRA). All wastes received at the LTA during its operating life were generated at the Facility and were associated with Unocal's petroleum refining operations. The LTA ceased receiving waste in 1983, was formally closed in 1989, and has been in post-closure care since that time.

## 6. Facility History

The Facility is currently owned and operated by Phillips 66 Company. The Facility was operated by Unocal Corporation and its predecessors (principally Union Oil Company of California) from its inception until April 1997, when it was purchased by Tosco Corporation (Tosco).

Tosco was acquired by Phillips Petroleum Company (Phillips) on September 14, 2001. On August 30, 2002, Phillips and Conoco Inc. (Conoco) entered into a transaction in which ConocoPhillips, a Delaware Corp. publicly traded on the NYSE under the symbol COP, became the parent corporation and owner of all of the outstanding common stock of Phillips and Conoco. Both Phillips and Conoco survived the consummation of the above transaction as wholly-owned subsidiaries of ConocoPhillips. Tosco was also, on the date of that transaction, still a wholly-owned subsidiary of Phillips. On December 31, 2002, Phillips changed its name to ConocoPhillips Company. On December 31, 2002, immediately after giving effect to the above-referenced name change, Conoco merged with and into ConocoPhillips Company, with ConocoPhillips Company being the surviving entity. On January 1, 2003, Tosco merged with and into ConocoPhillips Company with ConocoPhillips Company being the surviving entity.

On April 26, 2012 ownership and operation of the San Francisco Refinery was transferred from ConocoPhillips Company to its wholly-owned subsidiary at that time, Phillips 66 Company. On May 1, 2012, ConocoPhillips, which wholly-owned its operating subsidiary ConocoPhillips Company, spun-off its refinery assets and operations to Phillips 66 and Phillips 66 Company became a direct and wholly-owned operating subsidiary of Phillips 66. Phillips 66 Company incorporated in Delaware on November 10, 2011.

The LTA was constructed in two phases between November 1975 and February 1976, and last received hazardous waste in January 1983. Unocal Corporation (Unocal), a previous owner and operator of the Facility, prepared a Closure Plan for

the LTA in April 1988. The Plan was revised and subsequently approved by the California Department of Health Services (DHS) (predecessor to DTSC) and the U.S. Environmental Protection Agency (EPA) on July 1, 1988 and August 2, 1988, respectively.

Closure activities were completed on October 15, 1989, and Unocal submitted the required closure certifications to DHS on December 5, 1989. DHS acknowledged acceptance of the LTA closure certification documents in a letter to Unocal dated December 27, 1989. Subsequently, in June 1990, Unocal submitted a hazardous waste facility Post-Closure Permit application for the LTA to the U.S. EPA. U.S. EPA issued the Post-Closure Permit with an effective date of August 12, 1991 which expired on August 12, 2001.

In June 2003, a Part A and Part B application was submitted by ConocoPhillips Company for post closure permit renewal. DTSC issued the Post Closure Permit for the LTA with an effective date of April 15, 2004.

On October 26, 2005, DTSC acknowledged closure certification for the Bulk Container Storage Unit. The Permittee continues to store hazardous waste in the Bulk Container Storage Unit for a period of ninety (90) days under its generator status.

On August 2, 2012, DTSC acknowledged closure certification for the Former Container Storage Unit.

DTSC issued a new Post Closure Permit for the Primary Basin with an effective date of February 21, 2012. On December 12, 2012, DTSC granted two separate Class 1* Permit Modifications for both the Primary Basin and the Land Treatment Area to Phillips 66 Company due to the new ownership that became effective in May 2012.

## 7. Facility Size and Type for Fee Purposes

The Facility is categorized as a large post-closure facility pursuant to Health and Safety Code section 25205.7(d)(5). For the purpose of Health and Safety Code section 25205.4, the post-closure period for the Facility's LTA shall be deemed to have started from the effective date of this Post Closure Permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

## 8. Post-Closure Closure Cost Estimate

The Post Closure Cost Estimate approved by DTSC is $1,516,763 (in 2014 dollars).

## PART III. GENERAL CONDITIONS

1. Permit Application Documents

The Part "A" Application dated July 10, 2015 and the DTSC-approved Post Closure Permit Application dated September 24, 2013 and the subsequent revisions dated September 4, 2014, February 10, 2015 and June 26, 2015 (Approved Application) are hereby made a part of this Permit by reference.

2. Effect of Permit

(a) The Permittee shall comply with the terms and conditions of this Permit and the provisions of the Health and Safety Code and California Code of Regulations (Cal. Code Regs.), title 22, division 4.5. The issuance of this Permit by DTSC does not release the Permittee from any liability or duty imposed by federal or state statutes or regulations or local ordinances, except the obligation to obtain this Permit. The Permittee shall obtain the permits required by other governmental agencies, including but not limited to, those required by the applicable land use planning, zoning, hazardous waste, air quality, water quality, and solid waste management laws for the construction and/or operation of the Facility's LTA.

(b) The Permittee is permitted to operate, monitor and maintain this Facility's LTA post closure activities in accordance with the terms and conditions of this Permit and the Approved Application. Any management of hazardous wastes at the Land Treatment Area not specifically authorized in this Permit or otherwise authorized by DTSC is strictly prohibited.

(c) Compliance with the terms and conditions of this Permit does not constitute a complete defense to any action brought under any other law governing protection of public health or the environment, including, but not limited to, one brought for any imminent and substantial endangerment to human health or the environment

(d) DTSC's issuance of this Permit does not prevent DTSC from adopting or amending regulations that impose additional or more stringent requirements than those in existence at the time this Permit is issued and does not prevent the enforcement of these requirements against the Permittee.

(e) Failure to comply with any term or condition set forth in the Permit in the time or manner specified herein will subject the Permittee to possible enforcement action including but not limited to penalties pursuant to Health and Safety Code section 25187.

(f) Failure to submit any information required in connection with the Permit, or

falsification and/or misrepresentation of any submitted information, is grounds for revocation of this Permit (Cal. Code Regs., title 22, §66270.43).

(g) In case of conflicts between the Approved Application and the Permit, the Permit conditions take precedence.

(h) This Permit includes and incorporates by reference any conditions of waste discharge requirements issued to the Facility by the State Water Resources Control Board or any of the California Regional Water Quality Control Boards (RWQCB) and any conditions imposed pursuant to section 13227 of the Water Code.

3. Compliance with California Environmental Quality Act (CEQA)

A Notice of Exemption has been prepared in accordance with the requirements of Public Resources Code, section 21000 et seq. and the California Environmental Quality Act Guidelines, which are codified in title 14, California Code of Regulations, section 15070 et seq.

4. Environmental Monitoring

The Permittee shall comply with the applicable environmental monitoring and response program requirements of California Code of Regulations, title 22, division 4.5, chapter 14, articles 6 and 17.

(a) For the purpose of California Code of Regulations, title 22, section 66264.91(b), the elements of the Groundwater Monitoring and Response Program (GWMRP) for the Facility's LTA are those described in in Section 8 and Appendix G of the Approved Application.

(b) For the purpose of California Code of Regulations, title 22, section 66264.92, the Water Quality Protection Standard for the Facility's LTA is described in Section 8 and in Appendix G of the Approved Application.

(c) For the purpose of California Code of Regulations, title 22, section 66264.93, the Constituents of Concern (COCs) for the Facility's LTA are described in Sections 3.2.3 of Appendix G of the Approved Application. During future sampling events, if the Permittee finds constituents listed in title 22 California Code of Regulations, Chapter 14, Appendix IX, in the groundwater that are not already identified in the GWMRP as COCs, the Permittee shall add them to the list of COCs in Appendix G. Table 8-2, 8-3 and 8-4 as well as Table G-2 and G-3 of Appendix G of the Approved Application provides soil and groundwater monitoring program, analytical summary and frequency of sampling (see Exhibit A).

(d) For the purpose of California Code of Regulations, title 22, section 66264.94,

the Concentration Limits for the Facility is described in section 8.10 and Table 8.4 of the Approved Application (see Exhibit A).

(e) For the purpose of California Code of Regulations, title 22, section 66264.95, the Monitoring Points and Points of Compliance for the Facility's LTA are described in Sections 7.2.1.8, 8.7 and Sections 2 and 3 of Appendix G of the Approved Application. Also see Tables 8-2, and 8-3 of the Approved Application (see Exhibit A).

(f) For the purpose of California Code of Regulations, title 22, section 66264.96 the Compliance Period for the Facility's LTA shall be 30 years beginning with the date of the issuance of the post closure permit. DTSC may extend the post-closure monitoring period beyond 30 years to protect human health and the environment.

(g) For the purpose of California Code of Regulations, title 22, section 66264.97, the Statistical Methodology is described in sections 2.2.5 and 3.2.6 of Appendix G of the Approved Application.

(g) For the purpose of California Code of Regulations, title 22, section 66270.31, the monitoring, recording, and reporting program for the Facility's LTA is described in section 7.2.1.8 and Appendix G of the Approved Application. Permittee shall submit a post closure annual soil and groundwater monitoring report after each annual soil and groundwater monitoring and sampling event to DTSC.

(h) The Permittee shall comply with the requirements of the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order or requirement by the RWQCB. A copy of all semi-annual and annual groundwater monitoring reports (facility-wide) submitted to the RWQCB shall also be submitted to DTSC simultaneously.

5. Annual Hazardous Waste Reduction and Minimization Certification

The Permittee shall certify annually that it has a hazardous waste reduction and minimization program and method in place and shall keep the annual certification as part of its Operating Record in accordance with California Code of Regulations, title 22, section 66264.73(b)(9).

6. Access

(a) DTSC, its contractors, employees, agents, and/or any United States

Environmental Protection Agency representatives are authorized to enter and freely move about the Facility for the purposes of interviewing Facility personnel and contractors; inspecting records, operating logs, and contracts relating to the Facility; reviewing progress of the Permittee in carrying out the terms of Part VI of the Permit; conducting such testing, sampling, or monitoring as DTSC deems necessary; using a camera, sound recording, or other documentary-type equipment; verifying the reports and data submitted to DTSC by the Permittee; or confirming any other aspect of compliance with this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5. The Permittee shall provide DTSC and its representatives access at all reasonable times to the Facility and any other property to which access is required for implementation of any provision of this Permit, Health and Safety Code, division 20, chapter 6.5, and California Code of Regulations, title 22, division 4.5, and shall allow such persons to inspect and copy all records, files, photographs, documents, including all sampling and monitoring data, that pertain to work undertaken pursuant to the entire Permit or undertake any other activity necessary to determine compliance with applicable requirements.

(b) Nothing in this Permit shall limit or otherwise affect DTSC's right to access and entry pursuant to any applicable State or federal laws and regulations.

## PART IV. PERMITTED UNITS AND ACTIVITIES

This Permit authorizes the operation, monitoring and maintenance of the unit and activities listed below. The Permittee shall not treat, store or otherwise manage hazardous waste in any unit, other than those specified in this Part IV, unless otherwise authorized by DTSC. Any modifications to a unit or activity authorized by this Permit require the written approval of DTSC in accordance with the permit modification procedures set forth in California Code of Regulations, title 22, division 4.5.

For the purpose of title 22, California Code of Regulations, section 66270.1(c) and other similar, unit-specific regulatory requirements, this Facility has one post closure Hazardous Waste Management Unit (Land Treatment Area) for the purpose of this Permit. Post Closure requirements for the Primary Basin are covered under a separate Permit. The Land Treatment Area is described in detail in the Approved Application and is as follows:

UNIT NAME:

Land Treatment Area (LTA)

LOCATION:

The LTA is located in an undeveloped area in the southern portion of the Facility property. The LTA is within the fence line of the Facility and is part of a “buffer zone” that separates the operating areas of the facility from neighboring properties. The LTA is located within an area zoned as heavy industrial. The community of Rodeo is situated west of the LTA and is zoned for a mixture of residential, business, and commercial uses. The 2010 census indicated that there were 3,137 dwelling units and a population of 8,679 persons in Rodeo. The closest residential area is approximately one-half mile south of the LTA. Areas to the east and north of the LTA are zoned for agricultural use, and are primarily pasture for grazing cattle and horses.

ACTIVITY TYPE:

Conduct post closure activities, groundwater monitoring, soil sampling, inspection and maintenance of wells and cap/vegetative cover.

ACTIVITY DESCRIPTION:

Soil Monitoring: The required annual soil monitoring program includes six target locations (one location within each of the four quadrants of the LTA and two locations corresponding to low points in the LTA where water has historically ponded during significant rain events) are selected for the soil monitoring, with subsequent soil sample locations in future sampling events located within a 10 foot radius of the target locations (see attached Figures 2 and 3). Each of the six sample locations will be surveyed to establish documented location information. A surveyor will be used to re-locate the target sample locations in subsequent

soil sampling events.

Based on the known subsurface conditions of the vadose zone, it is assumed that soil samples collected from within a 10-foot radius of the target sample locations would represent similar subsurface soil conditions. The annual soil monitoring program including proposed sample locations, sampling schedule, constituents of concern, sampling methodology, and data evaluation procedures for the LTA is described in section 2 of Appendix G and the soil monitoring analytical summary shown in Table G-1 of Appendix G of the Approved Application. The annual soil sampling will be conducted during the same general time period as the annual groundwater sampling.

Groundwater Monitoring: Based on the consistent groundwater flow direction towards the southwest, groundwater samples will be collected annually from one background well (PZ-2R-1) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). All wells at the LTA (PZ-2R-1, VMW-11, PCW-12, PCW-13, PCW-14, PCW-15, CW-16, CW-17 and CW-18) will be gauged as well.

Groundwater quality samples will be collected annually from the one background well at three different elevations (PZ-2R-1, PZ-2R, or PZ-2RD) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). The background well location consists of three collocated piezometers completed at different depths (PZ-2R-1, PZ-2R, and PZ-2RD, listed in increasing completion depth) to account for seasonal groundwater fluctuations (i.e., the shallowest piezometer was occasionally dry). The shallowest of the three piezometers where water is encountered will be gauged/sampled as the background well. Annual well sampling is considered appropriate due to the stability of the groundwater conditions at the LTA. The annual groundwater monitoring program including proposed sample locations, sampling schedule, constituents of concern, sampling methodology, and data evaluation procedures for the LTA is described in section 3 of Appendix G and groundwater program analytical summary shown in Table G-3 of Appendix G of the Approved Application. The annual groundwater sampling will be conducted during the same general time period as the annual soil sampling. The groundwater gauging and sampling frequency summary is shown on Table G-2 of Appendix G of the Approved Application. Table 8-1, 8-2, 8-3 and 8-4 as well as Table G-1, G-2 and G-3 of Appendix G of the Approved Application provides soil and groundwater monitoring program, analytical summary and frequency of sampling (see Exhibit A).

Cover Maintenance: The vegetative cover of native grasses established on the surface of the LTA is maintained to minimize wind and rain erosion of the clean soil cap placed over the treatment zone. This is required to comply with California Code of Regulations, title 22, §§66264.280(c)(3) and 66264.280(c)(5). In addition, bare spots that develop in the vegetative cover during the post-closure period are replanted with appropriate plant species when discovered and as weather conditions permit. Burrow holes observed in the cover not covered with plant growth will be filled with imported soil.

Inspections and Reporting: The inspection checklist for the LTA and monitoring wells are listed in Appendix E of the Approved Application. Table 7-2 and 7-3 of the Approved

Application provides LTA Maintenance and Inspection Requirements.(see Exhibit A). The annual reports of soil and groundwater monitoring and inspections shall be submitted to DTSC by March 1 annually.

PHYSICAL DESCRIPTION:

The entire LTA occupies approximately 8.2 acres, of which 6.4 acres were used for land treatment of oily sludge and other wastes generated at the Facility between 1975 and 1983. The remaining acreage at the LTA consists of access roads and surface water run-on and runoff control berms and ditches.

The LTA consists of a fairly level area with an average elevation of 170 feet above mean sea level. Most of the down slope portion of the LTA is underlain with approximately 40 feet of fill material. The hills surrounding the valley that contains the LTA attain a maximum elevation of approximately 740 feet above mean sea level. The valley is drained by a small, unnamed stream that flows to the northwest through the Facility property and into San Pablo Bay.

The LTA is constructed on engineered fill. The treatment zone is contained horizontally on northern, eastern and southern sides by dikes of clayey fill and on the western side by a natural bedrock height. Vertically, the treatment zone extends to between 1 foot and 2 feet below grade over most of the LTA, and to 3.8 feet below grade in the southwestern corner. Most of the treatment zone is underlain by fill material comprised of silt and sandy clay. A narrow strip on the western side of the LTA that abuts a natural topographic height is the only portion of the treatment zone that is in contact with bedrock materials.

Direct precipitation during particularly wet winters tends to accumulate in the down slope portions on both the eastern and western sides of the LTA. In the summer of 1986, a drainpipe was installed in the dike between the two sides of the LTA to allow the eastern side to drain to the western side by gravity. The dike was recompacted to ensure its structural integrity. The western side of the LTA has always been drained by a pump, which transfers rainwater by pipeline to the process sewer and ultimately to the Facility's NPDES-regulated wastewater treatment facilities.

The LTA does not have a liner but does have a cap that consists of six inches of clean soil and a vegetative cover (CAP) that were placed over the surface of the LTA after completion of active treatment.

MAXIMUM CAPACITY:

The LTA treated about 23,460 tons of waste material during its active life.

WASTE SOURCES:

From construction of the LTA until April 1979, the wastes treated in the unit totaled

approximately 3,950 tons and consisted mainly of Dissolved Air Flotation (DAF) float (EPA Waste Number K048) and storm basin sediment from the Facility's wastewater treatment plant. Between April 1979 and January 1983, an estimated total of 17,900 tons of material was treated at the LTA, including seven major waste types: storm basin sediment from the Facility's wastewater treatment plant; DAF float; slop oil tank solids; API separator sludge; emulsion breaking tank waste; asphalt solvent tank waste; cracked naphtha tank waste, as well as various miscellaneous oily sludges and other hazardous and non-hazardous wastes. In addition, plant records indicate that 2,150 barrels (360 tons) of crude oil bottom sediments from Tank 154 were applied to the eastern side of the LTA, and 8,500 barrels (1,430 tons) of unspecified oily wastes were applied to both the eastern and western sides of the LTA.

WASTE TYPES:

The identified hazardous wastes managed in this unit can be classified into seven main types: storm basin sediment, DAF float, slop oil tank solids, API separator sludge, emulsion breaking tank waste, asphalt solvent tank waste, cracked naphtha tank waste. In addition, various miscellaneous oily sludges and other hazardous and non-hazardous wastes, crude oil bottom tank sediments and unspecified oily wastes were applied to LTA.

RCRA WASTE CODES:

Listed hazardous wastes applied to the LTA, and their associated waste codes provided in 40 Code of Federal Regulations, section 261.32, included DAF float (EPA Waste Number K048), slop oil emulsion solids (EPA Waste Number K049), and API separator sludge (EPA Waste Number K051). The Refinery wastes and the quantity of the wastes that were disposed of to the LTA between April 1979 and January 1983 are listed in the Appendix A of the approved Permit Application.

## PART V. SPECIAL CONDITIONS

1. The Permittee shall comply with the requirements specified in California Code of Regulations, title 22, section 66264.75 in each year's Annual Report to be submitted each March 1 and shall include the monitoring and response program data in the Annual Report.

2. The Permittee shall conduct inspection, visual monitoring, and maintenance during the post closure care period as described in Section 7 and 8 and Appendices E and G of the Approved Application. The inspection and maintenance report must be included in the Annual Report submitted to DTSC.

3. The Permittee shall monitor the groundwater in accordance with the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order and in accordance with Section 8 and Appendix G of the Approved Application. The Permittee shall simultaneously submit to DTSC a copy of the semi-annual and annual groundwater monitoring reports required by the RWQCB.

4. The Permittee shall collect groundwater level measurements and monitoring data as required in the Approved Application and by California Regional Water Quality Control Board San Francisco Bay Region Order (Order) issued to the Permittee in November 2015 and any other future order or requirement by the RWQCB.

5. Groundwater samples shall be collected and analyzed as required in the Approved Application from one background well (PZ-2R-1) and three downgradient wells (PCW-13, CW-18 and PCW-14) (Figure 4). Additionally, once every five years, each of the compliance monitoring wells shall be sampled and analyzed for the constituents listed in California Code of Regulations, title 22, Chapter 14, Appendix IX. All wells at the LTA (PZ-2R-1, VMW-11, PCW-12, PCW-13, PCW-14, PCW-15, CW-16, CW-17 and CW-18) shall be gauged as well. The annual reports of soil and groundwater monitoring and inspections shall be submitted to DTSC by March 1 annually.

6. Soil samples shall be collected and analyzed as required in section 2 of Appendix G of the Approved Application. Also see Table 8-1 as well as Table G-1 of Appendix G of the approved Permit Application.

7. The Permittee shall comply with section 66264.280(c) and shall inspect the

vegetative cover to make sure the bare spots that develop in the vegetative cover during the post-closure period are replanted with appropriate plant species when discovered and as weather conditions permit. Burrow holes observed in the cover not covered with plant growth shall be filled with imported soil or sealed with bentonite cement slurry. See Section 7.2.1.4 and Tables 7-2 and 7-3 of the approved Permit Application.

8. Pursuant to Civil Code section 1471(c), DTSC has determined that a land use covenant is reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on land of hazardous materials as defined in Health and Safety Code section 25260. Within 90 days of the effective date of this Permit, the Permittee shall submit a proposed Land Use Covenant to DTSC for review and approval. Upon final approval and execution by DTSC and Permittee, Permittee shall, within 180 days, have the fully executed Land Use Covenant recorded pursuant to California Code of Regulations, title 22, section 67391.1. The Permittee shall reimburse DTSC for its costs incurred in implemented and enforcing the Land Use Covenant, including costs incurred in conducting inspections, preparing inspection reports, and reviewing any Soil Management Plan or Health and Safety Plan as may be required by the Land Use Covenant. The Permittee's payments of DTSC's costs shall be made within 60 days of the date of billing statement to: Department of Toxics Substances Control, Accounting Unit, P.O. Box 806, Sacramento, California 95812-0806. All payments shall reference the name and address of the Facility.

9. DTSC may request additional Monitoring if new data indicates downward migration of contamination to soil and/or groundwater from the regulated unit.

# PART VI. CORRECTIVE ACTION

## A. SUMMARY OF THE CORRECTIVE ACTION AND GROUNDWATER REMEDIATION

Based on the findings of a RCRA Facility Assessment on February 24, 1989, the U.S. EPA issued an Administrative Order (EPA Docket No. RCRA 09-89-0012) under RCRA Section 3008(h.) This Administrative Order required investigation and, if necessary, corrective action for releases to the environment from six Solid Waste Management Units (SWMUs) at the Facility. The requirements of the U.S. EPA Order were subsequently modified and incorporated into the 1991 Post-Closure Permit for the Land Treatment Area (LTA).

The California Regional Water Quality Control Board San Francisco Bay Region (RWQCB) has issued a series of Waste Discharge Requirements (WDRs) requiring monitoring for leaks or spills from the refinery's surface impoundments and landfills. The specific requirements for corrective action at the Facility are incorporated in the following Order and any subsequent Order. RWQCB Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order that required investigation and remediation at several areas of concern, as well as maintenance of a perimeter containment and removal system along the San Pablo Bay Shoreline.

### IMPLEMENTED CORRECTIVE ACTION AT AREAS OF CONCERN (AOCS)

A free-phase liquid hydrocarbon (FPLH) recovery program and the following operating recovery systems serve to remediate and control contaminated groundwater and FPLH associated with the AOCs:

1. Interceptor Trench (Alignments A, B, C, and D);
2. B-Zone Extraction System;
3. Tank 302 Area Interceptor Trench (Alignment E);
4. Primary Basin/Main Storm Basin Extraction System;
5. Unit 76 Active Skimming System;
6. Tank 100 Area Interceptor Trench; and,
7. Marine Terminal Groundwater Protection System

These systems and the FPLH recovery program were implemented as part of the overall Groundwater Quality Management Program for the Facility. The Interceptor Trench, B-Zone Extraction System, and Marine Terminal Groundwater Protection System hydraulically control groundwater near the downgradient perimeter of the Facility. The Primary

Basin/Main Storm Basin Extraction System and the Unit 76 Active Skimming System mitigate interior “hot spots” of impacted groundwater.

STATUS OF CORRECTIVE MEASURES

Each corrective measure required by the RWQCB Order has been implemented at the Facility. An evaluation of the effectiveness of each of the corrective measures is provided to the RWQCB on a semi-annual basis, and in an annual summary.

B. CORRECTIVE ACTION CONDITIONS

1. The Permittee shall conduct corrective action at the Facility pursuant to Health and Safety Code sections 25187 and 25200.10. Corrective action shall be carried out under the oversight of the Regional Water Quality Control Board (RWQCB) pursuant to the California Regional Water Quality Control Board San Francisco Bay Region Order No. R2-2015-0046 Updated Waste Discharge Requirements and Rescission of Order No. R2-2005-0026 and Order No. R2-2012-0081 Amendment of Site Cleanup Requirements (Order No. R2-2006-0065) and any subsequent order or requirements by the RWQCB or USEPA.

# FIGURES

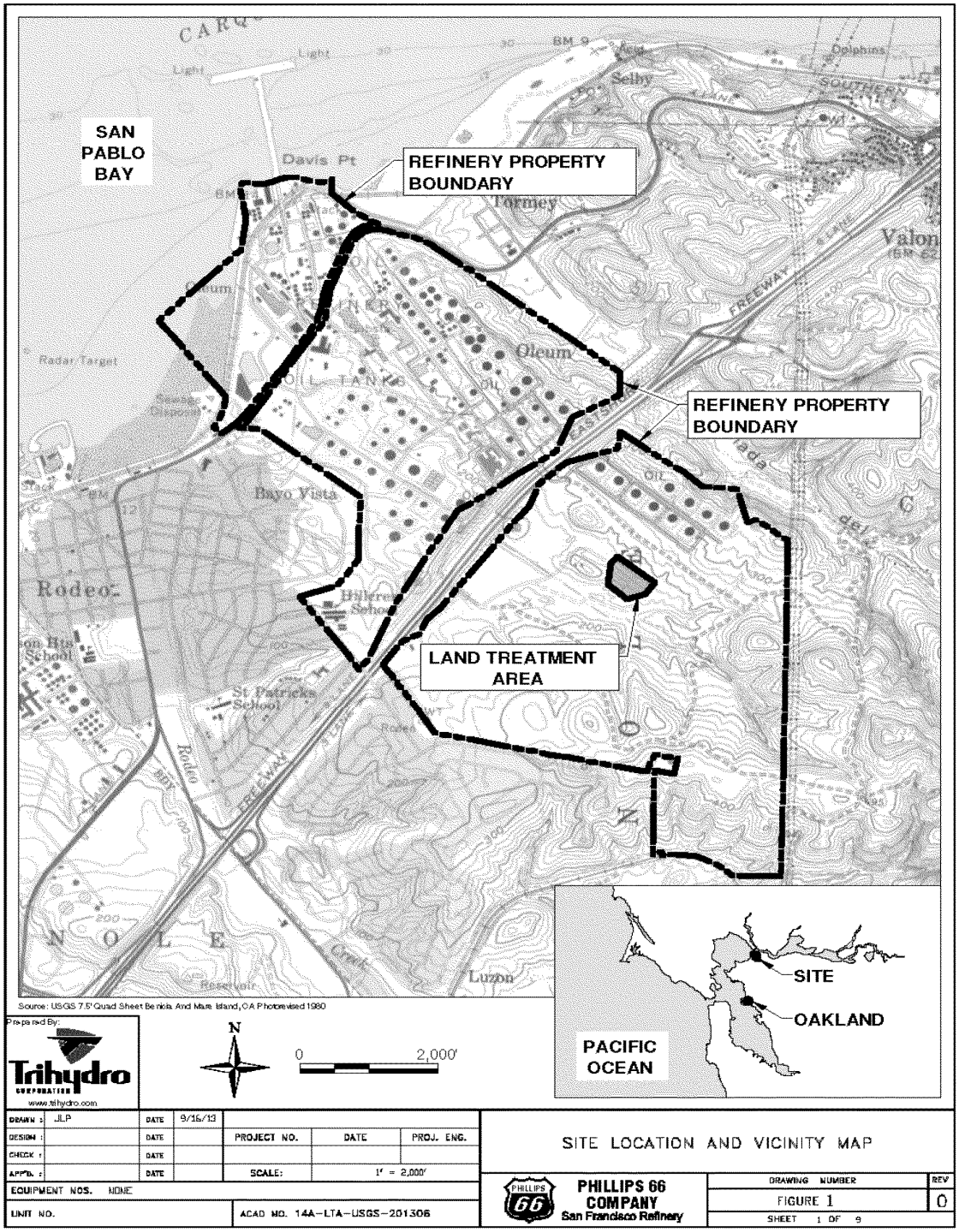


FIGURE 1 – Site Location and Vicinity Map

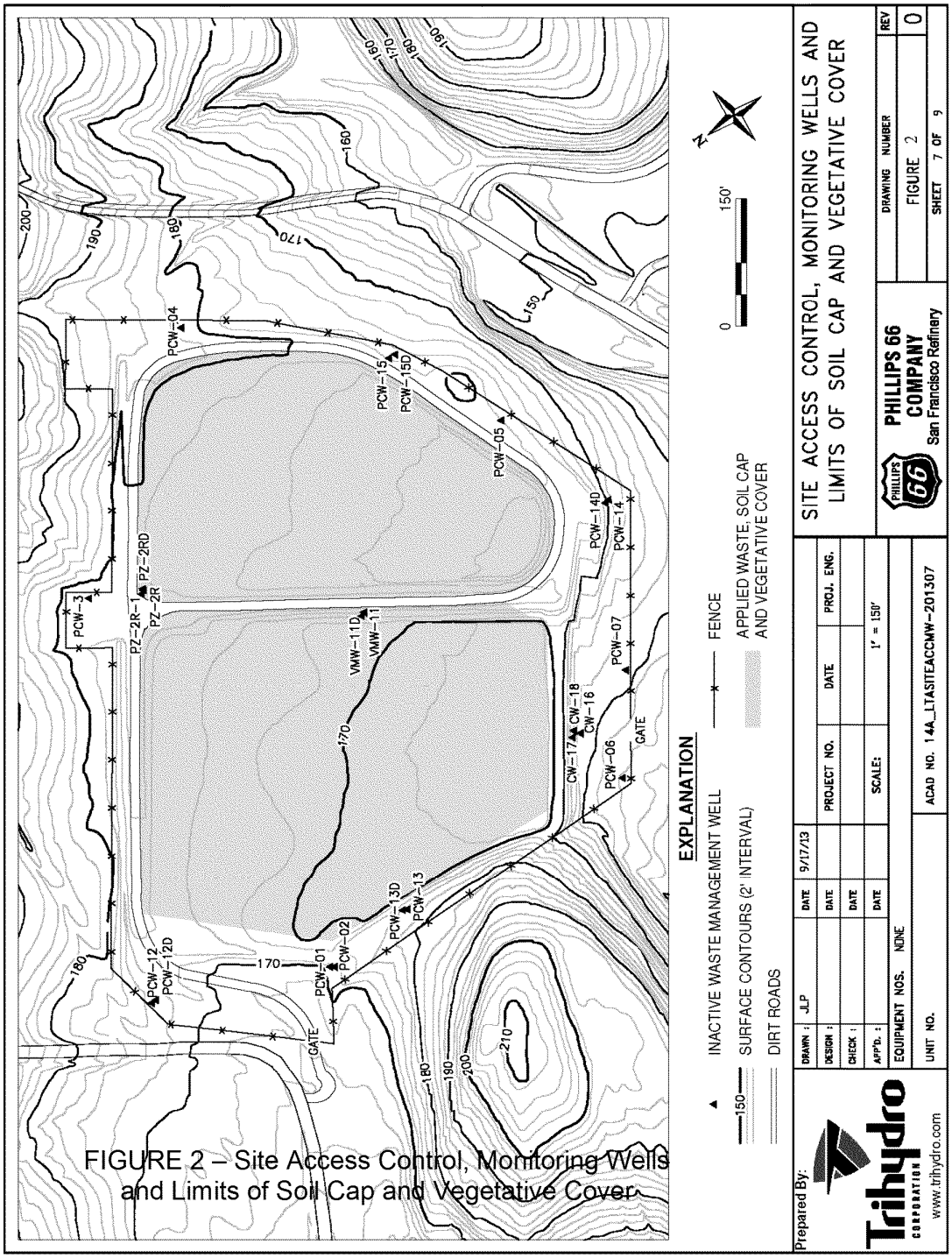


FIGURE 2 – Site Access Control, Monitoring Wells and Limits of Soil Cap and Vegetative Cover

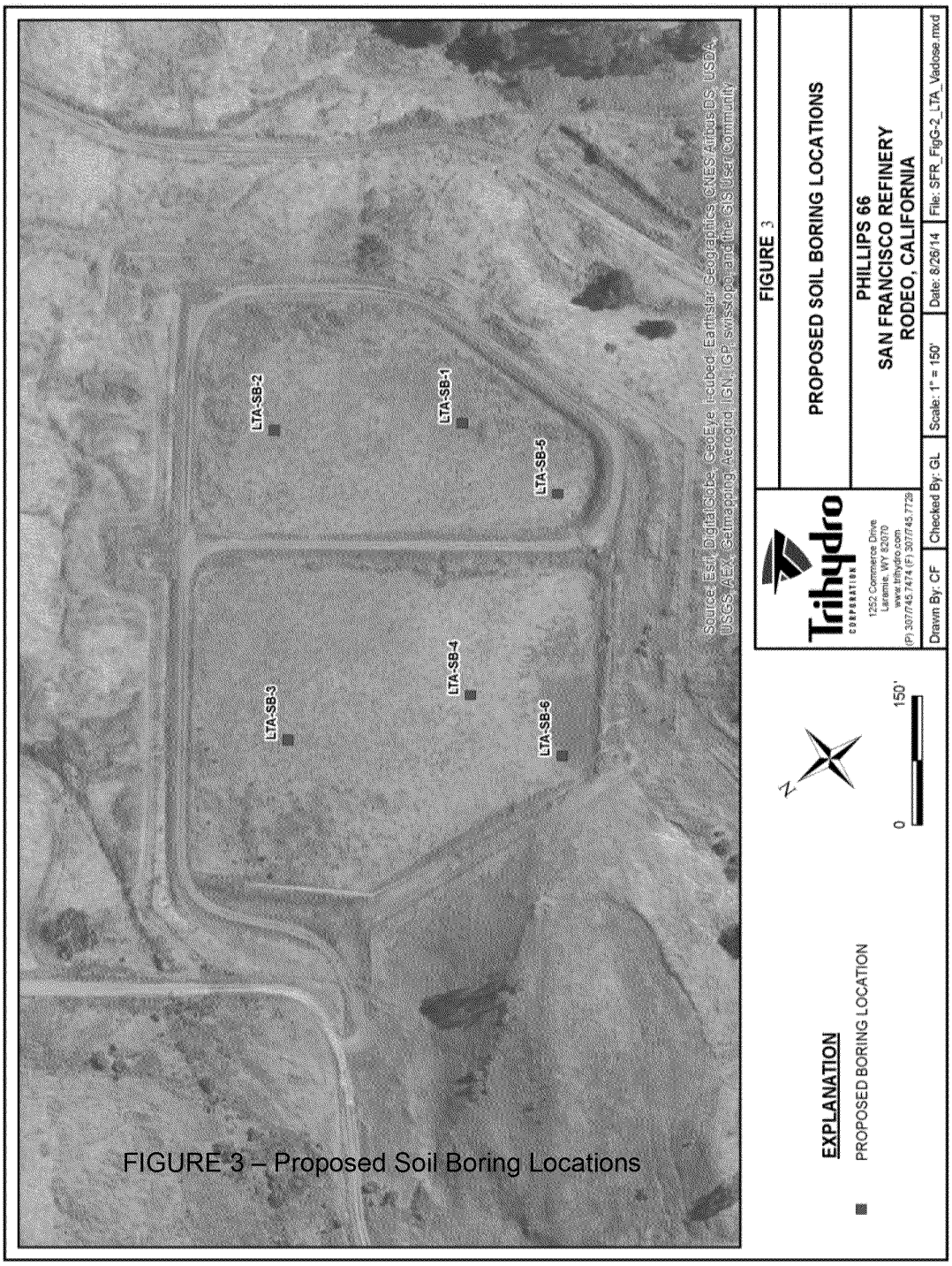


FIGURE 3 – Proposed Soil Boring Locations

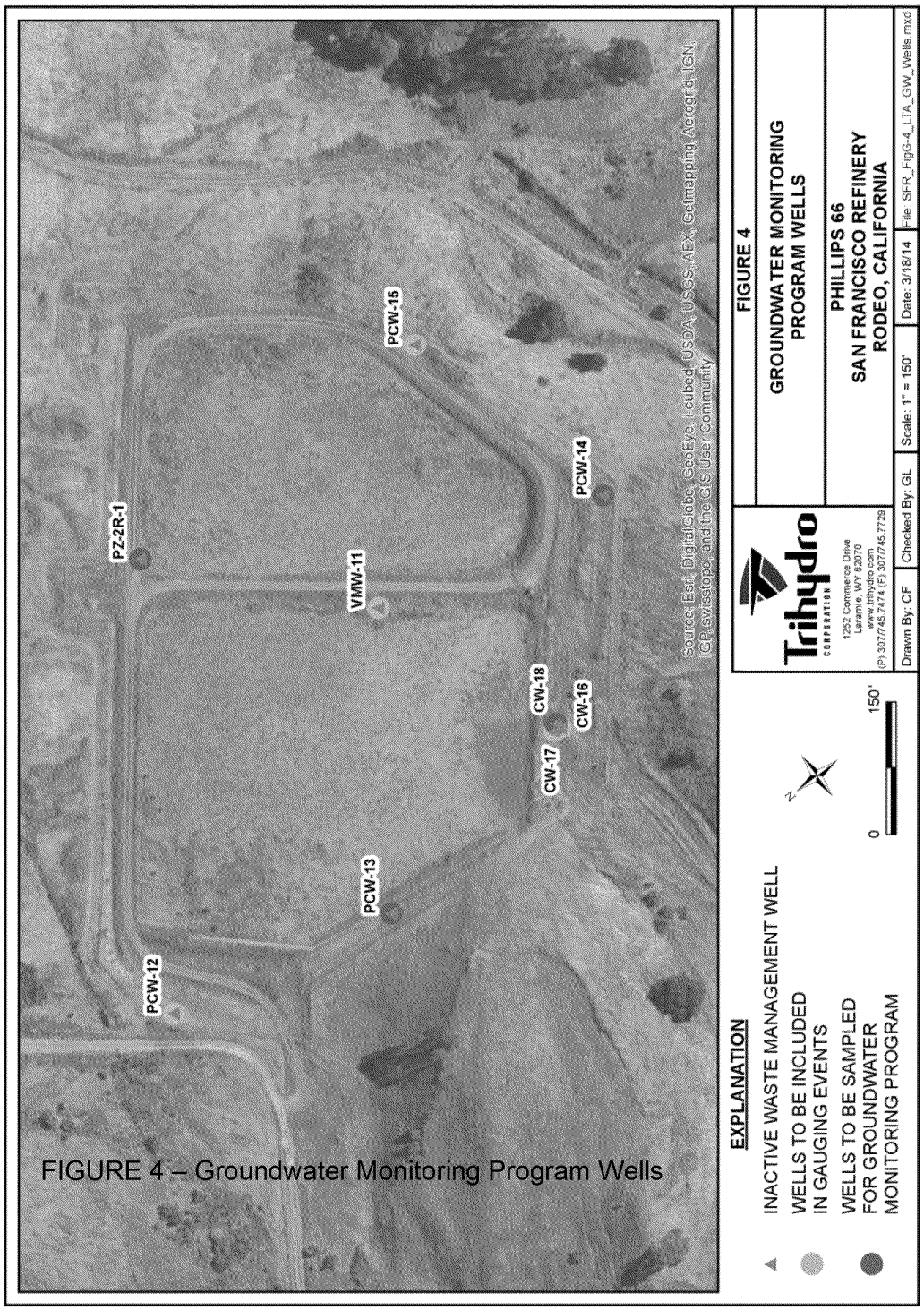


FIGURE 4 – Groundwater Monitoring Program Wells

# EXHIBIT A - Tables

**TABLE 7-2. LTA MAINTENANCE REQUIREMENTS**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Item | Frequency |
|---|---|
| LTA perimeter fence and warning signs | Within 30 days of discovery of need for maintenance. |
| Monitoring wells and piezometers | 1. Minor repairs-within 30 days of discovery of need for maintenance.<br>2. Replacement-after approval by RWQCB and DTSC. |
| Run-on and runoff control systems | 1. Berms-within 30 days of discovery of need for maintenance.<br>2. Pump-September to October of each year and within 30 days of discovery of need for maintenance.<br>3. Pipeline-within 30 days of discovery of need for maintenance. |
| Vegetative cover | Patching-as required and weather permitting. |

**TABLE 7-3. LTA INSPECTION REQUIREMENTS**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Item | Frequency |
|---|---|
| LTA perimeter fence and warning signs | Spring and fall of each year. |
| Monitoring wells and piezometers | Spring and fall of each year. |
| Run-on and runoff control systems | 1. Each October of every year (prior to rainy season).<br>2. First business day after each storm event.<br>3. Monthly from October 1 through May 1 of each year. |
| Vegetative cover | Spring and fall of each year. |

**TABLE 8-1. ANALYTICAL CONSTITUENTS FOR SOIL SAMPLES COLLECTED AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Analytical Method |
|---|---|
| pH | EPA 9045C |
| Total Petroleum Hydrocarbons as Diesel (TPH- D) with Silica Gel Cleanup | EPA 3630C/ EPA 8015M |
| Total Petroleum Hydrocarbons as Gasoline (TPH-G) | EPA 8260B |
| Total Oil and Grease (TOG) | EPA 1664HE |
| Chromium | EPA 6010B |
| Mercury | EPA 7471 |
| Lead | EPA 6010B |
| Nickel | EPA 6010B |
| Selenium | EPA 6010B |
| Vanadium | EPA 6010B |
| Zinc | EPA 6010B |
| Total Kjeldahl Nitrogen (TKN) | EPA 351.2M |
| Volatile Organic Compounds (VOCs) | EPA 8260B[a] |
| Semi-Volatile Organic Compounds (SVOCs) | EPA 8270C[a] |

[a] As outlined in the June 1990 RCRA Post-Closure Permit Application (Brown and Caldwell, June 1990) and incorporated into the June 28, 1991 Post-Closure Permit and the April 15, 2004 Post-Closure Permit by reference. Samples collected from the boring with the highest TOG concentrations are to be analyzed for VOCs and SVOCs.

**TABLE 8-2. MONITORING WELLS SAMPLED DURING POST-CLOSURE AT THE LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Description/Location |
|---|---|
| PZ-2R | Upgradient well for LTA. Monitors shallow groundwater zone for background concentrations of hazardous waste constituents. |
| VMW-11 | Located within southwest portion of LTA, monitors shallow groundwater directly beneath the treatment area. |
| PCW-12 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-13 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-14 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| PCW-15 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. |
| CW-16 | Deep well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater in relatively unweathered bedrock. |
| CW-17 | Intermediate-depth well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring across the fill/bedrock contact and in the lower portion of the fill interval. |
| CW-18 | Shallow well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring in the fill material overlying the drainage channel. |

**TABLE 8-3. ANALYTICAL METHODS FOR GROUNDWATER SAMPLES FROM MONITORING WELLS AT THE LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Analytical Method |
|---|---|
| pH | EPA 9040 |
| Specific conductance | EPA 120.1 |
| Chromium | EPA 6010B |
| Nickel, vanadium and zinc | EPA 6010B |
| Selenium | EPA 6010B |
| Lead | EPA 6010B |
| Mercury | EPA 7470A |
| Total dissolved solids (TDS) | EPA 160.1 |
| Volatile organic compounds (VOCs) | EPA 8260B |
| Semi-volatile organic compounds (SVOCs) | EPA 8270C |

**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Total Petroleum Hydrocarbons (TPH) as gasoline | 50 ug/L | PQL | 0.2 mg/kg | PQL |
| Total Petroleum Hydrocarbons (TPH) as diesel (with silica gel) | 50 ug/L | PQL | 2 mg/kg | PQL |
| Total oil and grease (TOG) | 5 mg/L | PQL | 50 mg/kg | PQL |
| Chromium | 0.05 mg/L | MCL | 160 mg/kg | LBNL, 2009 [c] |
| Mercury | 0.002 mg/L | MCL | 0.2 mg/kg | LBNL, 2009 [c] |
| Lead | 0.0524 mg/L | 95% UCL[a] | 48 mg/kg | LBNL, 2009 [c] |
| Nickel | 0.1 mg/L | MCL | 55 mg/kg | LBNL, 2009 [c] |
| Selenium | 0.05 mg/L | MCL | 1.1 mg/kg | LBNL, 2009 [c] |
| Vanadium | 0.003 mg/L | PQL (no MCL available) | 230 mg/kg | LBNL, 2009 [c] |
| Zinc | 0.01 mg/L | PQL (no MCL available) | 150 mg/kg | LBNL, 2009 [c] |
| Volatile Organic Compounds (VOCs) | | | | |
| Benzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromochloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromodichoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromoform | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Bromomethane | 1 ug/L | PQL | 0.005 mg/kg | PQL |
| n-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| sec-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| tert-Butylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Carbon Tetrachloride | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloroform | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Chloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 2-Chlorotoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 4-Chlorotoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dibromochloromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dibromo-3-chloropropane | 1.0 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dibromoethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dibromomethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,3-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,4-Dichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Dichlorodifluoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1-Dichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2-Dichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |



TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA

**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Volatile Organic Compounds (VOCs) (continued) | | | | |
| cis-1,2-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| trans-1,2-Dichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Ethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Hexachlorobutadiene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Isopropylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| p-Isopropyltoluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Methylene chloride | 1 ug/L | PQL | 0.01 mg/kg | PQL |
| Methyl tert-butyl ether | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Naphthalene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Styrene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2,2-Tetrachloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Tetrachloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Toluene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,3-Trichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,4-Trichlorobenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,1-Trichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2-Trichoroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Trichloroethene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Trichlorofluoromethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,3-Trichloropropane | 1 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,1,2-Trichloro-1,2,2-trichloroethane | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,2,4-Trimethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| 1,3,5-Trimethylbenzene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Vinyl chloride | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Total Xylenes | 1 ug/L | PQL | 0.01 mg/kg | PQL |
| p- & m-Xylenes | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| o-Xylene | 0.5 ug/L | PQL | 0.005 mg/kg | PQL |
| Semi-Volatile Organic Compounds (SVOCs) | | | | |
| Acenaphthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Acenapthylene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Aldrin | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Aniline | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| Anthracene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzidine | 20 ug/L | PQL | 3 mg/kg | PQL |
| Benzo(a)anthracene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(b)fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(k)fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(a)pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzo(g,h,i)perylene | 2 ug/L | PQL | 0.1 mg/kg | PQL |



**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA
PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Semi-Volatile Organic Compounds (SVOCs) (continued) | | | | |
| Benzoic acid | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| Benzyl alcohol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Benzyl butyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| alpha-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| beta-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| delta-BHC | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| gamma-BHC (Lindane) | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethoxy) methane | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethoxy) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroethyl) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Chloroisopropyl) ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| bis(2-Ethylhexyl) phthalate | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 4-Bromophenyl phenyl ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chloroaniline | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Chloronaphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chlorophenyl phenyl ether | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Chrysene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,4'-DDE | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,4'-DDT | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Dibenzo(a,h)anthracene | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Dibenzofuran | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2-Dichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,3-Dichorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,4-Dichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3,3-Dichlorobenzidine | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Dieldrin | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Diethylphthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Dimethyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Di-n-butyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dinitrotoluene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,6-Dinitrotoluene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Di-n-octyl phthalate | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2-Diphenylhydrazine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Endosulfan I | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Endosulfan II | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| Endosulfan sulfate | 3 ug/L | PQL | 0.1 mg/kg | PQL |
| Endrin | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| Endrin Aldehyde | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| Fluoranthene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Fluorene | 2 ug/L | PQL | 0.1 mg/kg | PQL |



**TABLE 8-4. PROPOSED CONCENTRATION LIMITS FOR LAND TREATMENT AREA PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Constituent | Proposed Groundwater CL | Source | Proposed Vadose Soil CL[b] | Source |
|---|---|---|---|---|
| Semi-Volatile Organic Compounds (SVOCs) (continued) | | | | |
| Heptachlor | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Heptachlor epoxide | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Hexachlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Hexachlorobutadiene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Indeno(1,2,3-CD)pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Isophorone | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Methylnaphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Naphthalene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2-Naphthylamine | 20 ug/L | PQL | 3 mg/kg | PQL |
| 2-Nitroaniline | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3-Nitroaniline | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| 4-Nitroaniline | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| Nitrobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitrosodimethylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitroso-N-propylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| N-Nitrosodiphenylamine | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Phenanthrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| Pyrene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 1,2,4-Trichlorobenzene | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Chloro-3-methylphenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 2-Chlorophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dichlorophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 2,4-Dimethylphenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4,6-Dinitro-2-methlyphenol | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| 2,4-Dinitrophenol | 10 ug/L | PQL | 0.5 mg/kg | PQL |
| 2-Methylphenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 3- & 4-Methylphenol | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| 2-Nitrophenol | 2 ug/L | PQL | 0.1 mg/kg | PQL |
| 4-Nitrophenol | 2 ug/L | PQL | 0.2 mg/kg | PQL |
| Pentachlorophenol | 10 ug/L | PQL | 0.2 mg/kg | PQL |
| 2,4,5-Trichlorophenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |
| 2,4,6-Trichlorophenol | 5 ug/L | PQL | 0.2 mg/kg | PQL |

Notes:

CL - Concentration Limit

MCL - Maximum Contaminant Level http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/MCLsandPHGs.shtml (accessed 1-15-15)

PQL - Practical Quantitation Limit, as established by California certified analytical laboratory for test methods included in Table 7-1 and 7-3.

[a] Background concentration for metals in groundwater calculated by computing the mean and determining a 95% upper confidence limit based on data from upgradient well PZ-2R.

[b] Proposed Vadose Soil CLs are only applicable to samples collected below the treatment zone and are not applicable to those collected within the LTA.

[c] Lawrence Berkeley National Laboratory (LBNL). 2009. Analysis of Background Distribution of Metals in the Soil at Lawrence Berkeley National Laboratory. Revised. Values used are the Upper Estimate of Regional Background Values (Table 4 of Report), based on Shacklette and Boerengen (1984) for the western conterminous United States.



**TABLE G-1. SOIL MONITORING PROGRAM ANALYTICAL SUMMARY
LAND TREATMENT AREA
PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Location | Chromium, Lead, Mercury, Selenium, Vanadium and Zinc (EPA Method 6010B/7000 Series) | pH (EPA Method 9040) | Total Petroleum Hydrocarbons as gasoline (EPA Method 8015M/8260B) | Total Petroleum Hydrocarbons as diesel with silica gel (EPA Method 8015M and 3630C) | Total Oil and Grease (EPA Method 1664HE) | Total Kjeldahl Nitrogen (EPA Method 351.4) | Volatile Organic Compounds (EPA Method 8260B) | Semivolatile Organic Compounds (EPA Method 8270C) |
|---|---|---|---|---|---|---|---|---|
| LTA-SB-1 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-2 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-3 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-4 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-5 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |
| LTA-SB-6 | Annual | Annual | Annual | Annual | Annual | Annual | Annual | Annual |

Notes:

Sampling Schedule for Annual events are for ten years (2015-2024)

Annual samples are to be collected from within 10 feet of Year 1 sample location and only in the vadose zone.

**TABLE G-2. GROUNDWATER GAUGING AND SAMPLING FREQUENCY SUMMARY**
**LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Description/Location | Groundwater Gauging | Groundwater Sample Collection |
|---|---|---|---|
| PZ-2R-1 | Upgradient well for LTA, located outside of treatment zone. Monitors shallow groundwater zone for background concentrations of hazardous waste constituents. Three wells are co-located but are completed at different depths to account for seasonal groundwater fluctuations - PZ-2 (known as PZ-2R-1) with a total depth of ~38 feet, PZ-2R with a total depth of ~45 feet, and PZ-2RD with a total depth of ~65 feet. The shallowest well where water is encountered will be gauged/sampled. | Annual Measurement | Annual Collection |
| VMW-11 | Located within southwest portion of LTA, monitors shallow groundwater directly beneath the treatment area. | Annual Measurement | NA |
| PCW-12 | Located near northern corner of LTA (cross/up-gradient location) | Annual Measurement | NA |
| PCW-13 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. | Annual Measurement | Annual Collection |
| PCW-14 | Point of compliance well to monitor shallow groundwater downgradient of the LTA. | Annual Measurement | Annual Collection |
| PCW-15 | Located near southern corner of LTA (crossgradient location). | Annual Measurement | NA |
| CW-16 | Deep well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater in relatively unweathered bedrock. | Annual Measurement | NA |
| CW-17 | Intermediate-depth well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring across the fill/bedrock contact and in the lower portion of the fill interval. | Annual Measurement | NA |
| CW-18 | Shallow well installed as part of cluster well configuration, located above the buried drainage channel at the southwestern toe of the LTA. This well monitors groundwater occurring in the fill material overlying the drainage channel. | Annual Measurement | Annual Collection |

Notes:
LTA - Land Treatment Area
NA - Not Applicable

**TABLE G-3. GROUNDWATER PROGRAM ANALYTICAL SUMMARY**
**LAND TREATMENT AREA**
**PHILLIPS 66 COMPANY SAN FRANCISCO REFINERY, RODEO, CALIFORNIA**

| Well | Dissolved Chromium, Lead, Mercury, Selenium, Vanadium and Zinc (EPA Method 200.8 and 245.1) | pH (EPA Method 150.1) | Total Dissolved Solids (EPA Method 160.1) | Volatile Organic Compounds (EPA Method 8260B) | Semivolatile Organic Compounds (EPA Method 8270C) | Appendix IX List (EPA Method 8260B, 8270C, 8141BG, 8081, 8082, 8151A, 200.8, 245.1, 9010, 9030, and 8280) |
|---|---|---|---|---|---|---|
| PZ-2R-1* | Annual | Annual | Annual | Annual | Annual | 5-Year |
| PCW-13 | Annual | Annual | Annual | Annual | Annual | 5-Year |
| PCW-14 | Annual | Annual | Annual | Annual | Annual | 5-Year |
| CW-18 | Annual | Annual | Annual | Annual | Annual | 5-Year |

Notes:
* = Three wells are co-located at PZ-2 but are completed at different depths to account for seasonal groundwater fluctuations - PZ-2 (known as PZ-2R-1) with a total depth of ~38 feet, PZ-2R with a total depth of ~45 feet, and PZ-2RD with a total depth of ~65 feet. The shallowest well where water is encountered will be sampled.

Sampling Schedule for 30-year events are Annual events from 2015-2045, except for 5-year events which are 2019, 2024, 2029, 2034, 2039, and 2044.

Annual - Indicates analyses except for 5-year events

Appendix IX List is noted in CCR Title 22, Division 4.5, Chapter 14, Article 19. Analytes include volatile organic compounds, semivolatile organic compounds, organophosphorous pesticides, organochlorine pesticides, polychlorinated biphenyls, chlorinated herbicides, dissolved metals, cyanide, sulfide, and 2,3,7,8-tetrachlorodibenzodioxin.

**To:** Zabaneh, Mahfouz[Zabaneh.Mahfouz@epa.gov]
**Cc:** Choe, Michael@DTSC[Michael.Choe@dtsc.ca.gov]; Edward.Nieto_dtsc.ca.gov[Edward.Nieto@dtsc.ca.gov]; Kang, Hai-Yong@DTSC[Hai-Yong.Kang@dtsc.ca.gov]
**From:** Tai, Lung-yin@DTSC
**Sent:** Wed 12/28/2016 5:18:42 PM
**Subject:** FW: Chevron Incidence Report
150813_CVX's Incident Report_final.pdf
150909_Case Screens_uploaded 10 dyas & final reports (where to find it).docx

Hi Mahfouz,

Attached is the Chevron's Incident Report (1st attachment) of the discovery of new SWMU in August 2015. It has been uploaded on the Envirostor. In case of need, it can be accessed under the "All Documents" in the Permitting Envirostor. The 2nd attachment shows where it can be found. Call me if of any question. Thanks.


***Lung-Yin (Lewis) Tai***

***California Environmental Protection Agency***

***Department of Toxic Substances Control***

***Permitting Division***

***Northern California Unit***

***8800 Cal Center Drive***

***Sacramento, CA 95826***

***Direct: (916) 255-3615***


**From:** Choe, Michael@DTSC
**Sent:** Tuesday, December 20, 2016 9:41 AM
**To:** Tai, Lung-yin@DTSC; Kang, Hai-Yong@DTSC
**Subject:** Chevron Incidence Report

Lewis and Hai Yong,

Please send Mike Zabaneh of USEPA a copy of the Incidence Report we got from Chevron about year ago of them finding drums at the site.

**Michael Choe, P.E.**

Senior Hazardous Substances Engineer

Permitting Division

Department of Toxic Substances Control

916-255-3635

Chevron

**Dave Feiglstok**
Manager

**Health, Environment & Safety**
Chevron Products Company
P. O. Box 1272
Richmond, CA 94802-0272
Tel 510 242 1400
Fax 510 242 5353
DFeiglstok@chevron.com

August 11, 2015

Mr. Lung-Yin (Lewis) Tai
California Environmental Protection Agency
Department of Toxic Substances Control
Office of Permitting
8800 Cal Center Drive
Sacramento, CA 95826

**Discovery of a new Solid Waste Management Unit (SWMU) at the Chevron Richmond Refinery EPA ID # CAD009114919**

Dear Mr. Tai,

In accordance with the Corrective Action section of the Richmond Refinery Hazardous Waste Facility Treatment and Storage Permit 06-BRK-13, Chevron Products Company is providing additional written follow-up notification to written notification previously provided on July 17, 2015. As previously indicated, a total of eight (8) 55-gallon drums containing tar-like material were discovered July 8, 2015 while performing excavation work along Channel St. at the Richmond Refinery.

Samples of the tar-like material contained in the intact drum and also from the soil and hydrocarbon contamination remediated at the excavation site were collected and submitted for waste characterization. The toxicity of the samples were evaluated using the TCLP, STLC and TTLC criteria set forth in CCR Title 22, Section 66261.24 (a) 2(A), as well as an aquatic bioassay. The analysis is complete and the materials sampled did not meet any federal or state hazardous waste criteria.

The complete test reports and aquatic bioassay results are enclosed with this letter. The following client identification numbers and sample profile descriptions may be used to match the test reports with the materials sampled:

| Client ID | Material Sampled |
|---|---|
| 12947 | Waste bin (#P21024) containing buried drums & soil with high hydrocarbon content |
| 12949 | Oily sludge content of intact buried drum |
| 12959 | Waste bin (#P20558) containing soil after site/hole clean up |

Chevron believes that the material did not present a present or potential hazard to human health and safety or to the environment. The site where the material was discovered is within the footprint of the refinery and the containment provided by the Richmond Refinery's Groundwater Protection System (GPS), thereby preventing the migration of contamination off-site including impacts to any groundwater in the area. The Refinery's GPS is detailed in the Refinery's Waste Discharge Requirements Order R2-2011-0036 issued by the Regional Water Quality Control Board.

Thank you for your attention to this matter. Please contact Ms. Lisa Duncan at (510) 242-5610 if you have any questions.

Sincerely,

Dave Feiglstok

Attachments

CC: Mr. Alan Friedman
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay St.
Suite 1400
Oakland, Ca
94612

# McCampbell Analytical, Inc.

*"When Quality Counts"*

# Analytical Report

**WorkOrder:** 1507455

**Report Created for:** Eurofins Lancaster Laboratories

940 Hensley Street
Richmond, CA 94801

**Project Contact:** Larry Starkey
**Project P.O.:**
**Project Name:** Contaminated Soil non Hazardous

**Project Received:** 07/14/2015

Analytical Report reviewed & approved for release on 07/27/2015 by:

Angela Rydelius,
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***

ACCREDITED IN ACCORDANCE WITH nelac

1534 Willow Pass Rd. Pittsburg, CA 94565 ♦ TEL: (877) 252-9262 ♦ FAX: (925) 252-9269 ♦ www.mccampbell.com
NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3



ED_001593_00025843

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# Glossary of Terms & Qualifier Definitions

**Client:** Eurofins Lancaster Laboratories
**Project:** Contaminated Soil non Hazardous
**WorkOrder:** 1507455

## Glossary Abbreviation

| | |
|---|---|
| 95% Interval | 95% Confident Interval |
| DF | Dilution Factor |
| DI WET | (DISTLC) Waste Extraction Test using DI water |
| DISS | Dissolved (direct analysis of 0.45 µm filtered and acidified water sample) |
| DUP | Duplicate |
| EDL | Estimated Detection Limit |
| ITEF | International Toxicity Equivalence Factor |
| LCS | Laboratory Control Sample |
| MB | Method Blank |
| MB % Rec | % Recovery of Surrogate in Method Blank, if applicable |
| MDL | Method Detection Limit |
| ML | Minimum Level of Quantitation |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| N/A | Not Applicable |
| ND | Not detected at or above the indicated MDL or RL |
| NR | Data Not Reported due to matrix interference or insufficient sample amount. |
| PF | Prep Factor |
| RD | Relative Difference |
| RL | Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.) |
| RPD | Relative Percent Deviation |
| RRT | Relative Retention Time |
| SPK Val | Spike Value |
| SPKRef Val | Spike Reference Value |
| SPLP | Synthetic Precipitation Leachate Procedure |
| TCLP | Toxicity Characteristic Leachate Procedure |
| TEQ | Toxicity Equivalents |
| WET (STLC) | Waste Extraction Test (Soluble Threshold Limit Concentration) |

McCampbell Analytical, Inc.
*"When Quality Counts"*

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http://www.mccampbell.com / E-mail: main@mccampbell.com

| | | |
|---|---|---|
| Eurofins Lancaster Laboratories | Client Project ID: Contaminated Soil non Hazardous | Date Sampled: 07/10/15 |
| 940 Hensley Street | | Date Received: 07/14/15 |
| | Client Contact: Larry Starkey | Date Extracted: 07/21/15-07/25/15 |
| Richmond, CA 94801 | Client P.O.: | Date Analyzed: 07/21/15-07/25/15 |

## CA Title 22 Acute Fish Bioassay Screen Test for Hazardous Waste

Extraction Method: CA DFG (Polisini & Miller) Analytical Method: CA DFG (Polisini & Miller) Work Order: 1507455

| | | | | | |
|---|---|---|---|---|---|
| Lab ID | 1507455-001A | Species | Pimephales promelas | Avg. Length (mm) | 31.9 |
| Client ID | 12947 | Common Name | Fathead Minnows | Avg. Weight (g) | 0.331 |
| Matrix | Sludge | | | Max Weight (g) | 0.356 |
| Control Water | Soft Synthetic Water | | | Min Weight (g) | 0.31 |

| Concentration | Survival | | Dissolved O2 (mg/L) | | pH | | Temperature (°C) | | Comments | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | A | B | | |
| Control | 10 | 10 | 8.94 | 8.97 | 7.68 | 7.71 | 20.0 | 20.0 | Analyst: | WV |
| 250 mg/L | 10 | 10 | 8.98 | 9.02 | 7.58 | 7.62 | 20.0 | 20.0 | | |
| 500 mg/L | 10 | 10 | 8.95 | 8.99 | 7.61 | 7.64 | 20.0 | 20.0 | Date: | 7/21/2015 |
| 750 mg/L | 10 | 10 | 8.93 | 8.97 | 7.59 | 7.63 | 20.0 | 20.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.61 | 8.68 | 7.53 | 7.50 | 21.0 | 21.0 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.59 | 8.54 | 7.41 | 7.45 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 8.60 | 8.47 | 7.35 | 7.38 | 21.0 | 21.0 | Date: | 7/22/2015 |
| 750 mg/L | 10 | 10 | 8.51 | 8.45 | 7.29 | 7.32 | 21.0 | 21.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.36 | 8.44 | 7.39 | 7.35 | 20.2 | 20.2 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.21 | 8.15 | 7.28 | 7.32 | 20.2 | 20.2 | | |
| 500 mg/L | 10 | 10 | 8.26 | 8.08 | 7.22 | 7.25 | 20.2 | 20.2 | Date: | 7/23/2015 |
| 750 mg/L | 10 | 10 | 8.17 | 8.02 | 7.16 | 7.20 | 20.2 | 20.2 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.20 | 8.31 | 7.33 | 7.27 | 21.0 | 21.0 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 7.96 | 7.92 | 7.14 | 7.11 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 9 | 8.04 | 7.87 | 7.06 | 7.09 | 21.0 | 21.0 | Date: | 7/24/2015 |
| 750 mg/L | 8 | 8 | 7.91 | 7.83 | 6.94 | 6.97 | 21.0 | 21.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.15 | 8.22 | 7.21 | 7.18 | 21.0 | 21.0 | Analyst: | MAX |
| 250 mg/L | 10 | 10 | 7.88 | 7.80 | 7.11 | 7.02 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 9 | 7.86 | 7.73 | 6.95 | 6.98 | 21.0 | 21.0 | Date: | 7/25/2015 |
| 750 mg/L | 7 | 8 | 7.84 | 7.72 | 6.81 | 6.83 | 21.0 | 21.0 | Time: | 12:00 PM |

| | Initial | | Final | |
|---|---|---|---|---|
| | Control | 750 mg/L | Control | 750 mg/L |
| Hardness (mg/L as CaCO3) | 40 | 40 | 42 | 42 |
| Alkalinity (mg/L as CaCO3) | 29.16 | 31.24 | 35.96 | 41.64 |
| Conductivity (uS/cm) | 160.4 | 158.3 | 169.8 | 183.6 |
| Salinity (‰, ppt) | N/A | N/A | N/A | N/A |

**Result: Mortality <40% at 750mg/L. Therefore LC50>=500mg/L ('non-hazardous')**

96 LC50: N/A LC50 Method: N/A
95% Upper Confident Limit: N/A 95% Lower Confident Limit: N/A

CDPH ELAP 1644 ♦ NELAP 4033ORELAP AB Analyst's Initial Angela Rydelius, Lab Manager

ED_001593_00025843

McCampbell Analytical, Inc.
1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD



**WorkOrder: 1507455** **ClientCode: LLR**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

**Report to:**
Larry Starkey
Eurofins Lancaster Laboratories
940 Hensley Street
Richmond, CA 94801
510-232-8894 FAX: 510-232-4913

Email: larrystarkey@eurofinsus.com
cc/3rd Party:
PO:
ProjectNo: Contaminated Soil non Hazardous

**Bill to:**
Kay Hower
Eurofins NSC US, Inc.
2425 New Holland Pike
Lancaster, PA 17601
apinvoices@lancasterlabs.com

**Requested TAT:** 5 days

***Date Received:*** 07/14/2015
***Date Printed:*** 07/27/2015

| Lab ID | Client ID | Matrix | Collection Date | Hold | Requested Tests (See legend below) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1507455-001 | 12947 | Sludge | 7/10/2015 19:00 | | A | | | | | | | | | | | |

**Test Legend:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | FISHHAZSCREEN_S | 2 | | 3 | | 4 | | 5 | |
| 6 | | 7 | | 8 | | 9 | | 10 | |
| 11 | | 12 | | | | | | | |

**Prepared by: Briana Cutino**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

# WORK ORDER SUMMARY

**Client Name:** EUROFINS LANCASTER LABORATORIES
**Project:** Contaminated Soil non Hazardous
**Comments:**

**QC Level:** LEVEL 2
**Client Contact:** Larry Starkey
**Contact's Email:** larrystarkey@eurofinsus.com

**Work Order:** 1507455
**Date Received:** 7/14/2015

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

| Lab ID | Client ID | Matrix | Test Name | Containers /Composites | Bottle & Preservative | De-chlorinated | Collection Date & Time | TAT | Sediment Content | Hold | SubOut |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1507455-001A | 12947 | Sludge | Fish Bioassay Screen Test for Haz Waste | 1 | 8OZ GJ | ☐ | 7/10/2015 19:00 | 10 days | | ☐ | |

**NOTES:** **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

**- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.**



ED_001593_00025843

# Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

| | |
|---|---|
| Client: Eurofins Lancaster Laboratories | |
| Project Name/#: Contaminated Soil Non Hazardous | Site ID #: |
| Project Manager: Larry Starkey | P.O. #: |
| Sampler: Fred Jacobs | PWSID #: |
| Phone #: 510-672-4074 | Quote #: |
| State where sample(s) were collected: | |

| Sample Identification | Collection Date | Collection Time | Grab | Composite | Matrix: Soil | Matrix: Sediment | Matrix: Potable Water | Matrix: Ground | Matrix: NPDES | Matrix: Surface | Matrix: Other: | Total # of Containers | Analyses Requested / Preservation Codes: Bioassay Screen | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12947 | 7/10/2015 | 9:00am | | X | X | | | | | | | 1 | X | 5 Day TAT |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl  T = Thiosulfate
N = $HNO_3$  B = NaOH
S = $H_2SO_4$  P = $H_3PO_4$
O = Other

**Turnaround Time Requested (TAT)** (please check): Standard ☐ Rush ☑
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed: 5 day TAT

Rush results requested by (please check): E-Mail ☑ Phone ☐

E-mail Address: Larrystarkey@eurofinsus.com

Phone: 510-672-4074

**Data Package Options** (please check if required)

| | | | |
|---|---|---|---|
| Type I (Validation/non-CLP) | ☐ | MA MCP | ☐ |
| Type III (Reduced non-CLP) | ☐ | CT RCP | ☐ |
| Type IV (CLP SOW) | ☐ | TX TRRP-13 | ☐ |
| Type VI (Raw Data Only) | ☐ | | |

**EDD Required?** Yes ☐ No ☐ If yes, format: _____

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [signature] | 7/14/15 | 1200 | [signature] | 7/14/15 | 1200 |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |
| Relinquished by: | Date | Time | Received by: | Date | Time |

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt _____ °C



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http://www.mccampbell.com / E-mail: main@mccampbell.com

# Sample Receipt Checklist

| | | | |
|---|---|---|---|
| Client Name: | **Eurofins Lancaster Laboratories** | Date and Time Received: | **7/14/2015 2:46:58 PM** |
| Project Name: | **Contaminated Soil non Hazardous** | LogIn Reviewed by: | Briana Cutino |
| WorkOrder №: | **1507455** Matrix: Sludge | Carrier: | Client Drop-In |

## Chain of Custody (COC) Information

| | | |
|---|---|---|
| Chain of custody present? | Yes ✔ | No ☐ |
| Chain of custody signed when relinquished and received? | Yes ✔ | No ☐ |
| Chain of custody agrees with sample labels? | Yes ✔ | No ☐ |
| Sample IDs noted by Client on COC? | Yes ✔ | No ☐ |
| Date and Time of collection noted by Client on COC? | Yes ✔ | No ☐ |
| Sampler's name noted on COC? | Yes ✔ | No ☐ |

## Sample Receipt Information

| | | | |
|---|---|---|---|
| Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | NA ✔ |
| Shipping container/cooler in good condition? | Yes ✔ | No ☐ | |
| Samples in proper containers/bottles? | Yes ✔ | No ☐ | |
| Sample containers intact? | Yes ✔ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ✔ | No ☐ | |

## Sample Preservation and Hold Time (HT) Information

| | | | |
|---|---|---|---|
| All samples received within holding time? | Yes ✔ | No ☐ | |
| Sample/Temp Blank temperature | Temp: 4.4°C | | NA ☐ |
| Water - VOA vials have zero headspace / no bubbles? | Yes ☐ | No ☐ | NA ✔ |
| Sample labels checked for correct preservation? | Yes ✔ | No ☐ | |
| pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? | Yes ✔ | No ☐ | NA ☐ |
| Samples Received on Ice? | Yes ☐ | No ✔ | |

UCMR3 Samples:

| | | | |
|---|---|---|---|
| Total Chlorine tested and acceptable upon receipt for EPA 522? | Yes ☐ | No ☐ | NA ✔ |
| Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? | Yes ☐ | No ☐ | NA ✔ |

** NOTE: If the "No" box is checked, see comments below.*

Comments:

# McCampbell Analytical, Inc.

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# Analytical Report

**WorkOrder:** 1507456

**Report Created for:** Eurofins Lancaster Laboratories

940 Hensley Street
Richmond, CA 94801

**Project Contact:** Larry Starkey
**Project P.O.:**
**Project Name:** Oily Sludge- Hazardous

**Project Received:** 07/14/2015

Analytical Report reviewed & approved for release on 07/27/2015 by:

Angela Rydelius,
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***

ACCREDITED IN ACCORDANCE WITH nelac



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Toll Free Telephone: (877) 252-9262 / Fax: (925) 252-9269
http://www.mccampbell.com / E-mail: main@mccampbell.com

# Glossary of Terms & Qualifier Definitions

**Client:** Eurofins Lancaster Laboratories
**Project:** Oily Sludge- Hazardous
**WorkOrder:** 1507456

## Glossary Abbreviation

| | |
|---|---|
| 95% Interval | 95% Confident Interval |
| DF | Dilution Factor |
| DI WET | (DISTLC) Waste Extraction Test using DI water |
| DISS | Dissolved (direct analysis of 0.45 µm filtered and acidified water sample) |
| DUP | Duplicate |
| EDL | Estimated Detection Limit |
| ITEF | International Toxicity Equivalence Factor |
| LCS | Laboratory Control Sample |
| MB | Method Blank |
| MB % Rec | % Recovery of Surrogate in Method Blank, if applicable |
| MDL | Method Detection Limit |
| ML | Minimum Level of Quantitation |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| N/A | Not Applicable |
| ND | Not detected at or above the indicated MDL or RL |
| NR | Data Not Reported due to matrix interference or insufficient sample amount. |
| PF | Prep Factor |
| RD | Relative Difference |
| RL | Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.) |
| RPD | Relative Percent Deviation |
| RRT | Relative Retention Time |
| SPK Val | Spike Value |
| SPKRef Val | Spike Reference Value |
| SPLP | Synthetic Precipitation Leachate Procedure |
| TCLP | Toxicity Characteristic Leachate Procedure |
| TEQ | Toxicity Equivalents |
| WET (STLC) | Waste Extraction Test (Soluble Threshold Limit Concentration) |



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http://www.mccampbell.com / E-mail: main@mccampbell.com

| | | |
|---|---|---|
| Eurofins Lancaster Laboratories | Client Project ID: Oily Sludge- Hazardous | Date Sampled: 07/10/15 |
| | | Date Received: 07/14/15 |
| 940 Hensley Street | Client Contact: Larry Starkey | Date Extracted: 07/21/15-07/25/15 |
| Richmond, CA 94801 | Client P.O.: | Date Analyzed: 07/21/15-07/25/15 |

## CA Title 22 Acute Fish Bioassay Screen Test for Hazardous Waste

Extraction Method: CA DFG (Polisini & Miller) Analytical Method: CA DFG (Polisini & Miller) Work Order: 1507456

| | | | | | |
|---|---|---|---|---|---|
| Lab ID | 1507456-001A | Species | Pimephales promelas | Avg. Length (mm) | 31.9 |
| Client ID | 12949 | Common Name | Fathead Minnows | Avg. Weight (g) | 0.331 |
| Matrix | Sludge | | | Max Weight (g) | 0.356 |
| Control Water | Soft Synthetic Water | | | Min Weight (g) | 0.31 |

| Concentration | Survival | | Dissolved O2 (mg/L) | | pH | | Temperature (°C) | | Comments | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | A | B | | |
| Control | 10 | 10 | 8.94 | 8.97 | 7.68 | 7.71 | 20.0 | 20.0 | Analyst: | WV |
| 250 mg/L | 10 | 10 | 8.84 | 8.87 | 7.64 | 7.67 | 20.0 | 20.0 | | |
| 500 mg/L | 10 | 10 | 8.82 | 8.86 | 7.62 | 7.65 | 20.0 | 20.0 | Date: | 7/21/2015 |
| 750 mg/L | 10 | 10 | 8.86 | 8.87 | 7.64 | 7.68 | 20.0 | 20.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.61 | 8.68 | 7.53 | 7.50 | 21.0 | 21.0 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.46 | 8.50 | 7.44 | 7.48 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 8.41 | 8.49 | 7.40 | 7.37 | 21.0 | 21.0 | Date: | 7/22/2015 |
| 750 mg/L | 10 | 10 | 85.0 | 8.54 | 7.32 | 7.36 | 21.0 | 21.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.36 | 8.44 | 7.39 | 7.35 | 20.2 | 20.2 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.28 | 8.21 | 7.24 | 7.27 | 20.2 | 20.2 | | |
| 500 mg/L | 10 | 10 | 8.14 | 8.18 | 7.21 | 7.18 | 20.2 | 20.2 | Date: | 7/23/2015 |
| 750 mg/L | 10 | 10 | 8.20 | 8.23 | 7.14 | 7.16 | 20.2 | 20.2 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.20 | 8.31 | 7.33 | 7.27 | 21.0 | 21.0 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.12 | 8.03 | 7.16 | 7.20 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 7.95 | 7.89 | 7.13 | 7.09 | 21.0 | 21.0 | Date: | 7/24/2015 |
| 750 mg/L | 10 | 10 | 7.83 | 7.86 | 7.05 | 7.07 | 21.0 | 21.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.15 | 8.22 | 7.21 | 7.18 | 21.0 | 21.0 | Analyst: | MAX |
| 250 mg/L | 10 | 10 | 8.03 | 7.89 | 7.11 | 7.16 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 7.73 | 7.79 | 7.08 | 7.01 | 21.0 | 21.0 | Date: | 7/25/2015 |
| 750 mg/L | 10 | 10 | 7.71 | 7.63 | 6.95 | 6.90 | 21.0 | 21.0 | Time: | 12:00 PM |

| | Initial | | Final | |
|---|---|---|---|---|
| | Control | 750 mg/L | Control | 750 mg/L |
| Hardness (mg/L as CaCO3) | 40 | 40 | 42 | 44 |
| Alkalinity (mg/L as CaCO3) | 29.16 | 30.04 | 35.96 | 40.58 |
| Conductivity (uS/cm) | 160.4 | 162.2 | 169.8 | 184.1 |
| Salinity (‰, ppt) | N/A | N/A | N/A | N/A |

**Result: Mortality <40% at 750mg/L. Therefore LC50>=500mg/L ('non-hazardous')**

96 LC50: N/A LC50 Method: N/A
95% Upper Confident Limit: N/A 95% Lower Confident Limit: N/A

CDPH ELAP 1644 ♦ NELAP 4033ORELAP AB Analyst's Initial Angela Rydelius, Lab Manager

ED_001593_00025843

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(925) 252-9262

# CHAIN-OF-CUSTODY RECORD



**WorkOrder: 1507456** **ClientCode: LLR**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

**Report to:**
Larry Starkey
Eurofins Lancaster Laboratories
940 Hensley Street
Richmond, CA 94801
510-232-8894 FAX: 510-232-4913

Email: larrystarkey@eurofinsus.com
cc/3rd Party:
PO:
ProjectNo: Oily Sludge- Hazardous

**Bill to:**
Kay Hower
Eurofins NSC US, Inc.
2425 New Holland Pike
Lancaster, PA 17601
apinvoices@lancasterlabs.com

**Requested TAT:** 5 days

***Date Received:*** 07/14/2015
***Date Printed:*** 07/14/2015

| Lab ID | Client ID | Matrix | Collection Date | Hold | Requested Tests (See legend below) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1507456-001 | 12949 | Sludge | 7/10/2015 20:00 | ☐ | A | | | | | | | | | | | |

**Test Legend:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | FISHHAZSCREEN_S | 2 | | 3 | | 4 | | 5 | |
| 6 | | 7 | | 8 | | 9 | | 10 | |
| 11 | | 12 | | | | | | | |

**Prepared by: Briana Cutino**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

# WORK ORDER SUMMARY

**Client Name:** EUROFINS LANCASTER LABORATORIES
**Project:** Oily Sludge- Hazardous
**Comments:**

**QC Level:** LEVEL 2
**Client Contact:** Larry Starkey
**Contact's Email:** larrystarkey@eurofinsus.com

**Work Order:** 1507456
**Date Received:** 7/14/2015

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

| Lab ID | Client ID | Matrix | Test Name | Containers /Composites | Bottle & Preservative | De-chlorinated | Collection Date & Time | TAT | Sediment Content | Hold | SubOut |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1507456-001A | 12949 | Sludge | Fish Bioassay Screen Test for Haz Waste | 1 | 8OZ GJ | ☐ | 7/10/2015 20:00 | 10 days | | ☐ | |

**NOTES: - STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

**- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.**



ED_001593_00025843

1801456

# Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # _____ Group # _____ Sample # _____

| | |
|---|---|
| Client: | Eurofins Lancaster Laboratories |
| Project Name/#: | Oily Sludge-Hazardous |
| Site ID #: | |
| Project Manager: | Larry Starkey |
| P.O. #: | |
| Sampler: | Fred Jacobs |
| PWSID #: | |
| Phone #: | 510-672-4074 |
| Quote #: | |
| State where sample(s) were collected: | |

For Lab Use Only
SF #: _____
SCR #: _____

Preservation Codes
H = HCl, T = Thiosulfate, N = $HNO_3$, B = NaOH, S = $H_2SO_4$, P = $H_2PO_4$, O = Other

| Sample Identification | Collection Date | Collection Time | Grab | Composite | Matrix: Soil | Matrix: Sediment | Matrix: Potable Water | Matrix: Ground Water | Matrix: Surface Water | Matrix: NPDES | Matrix: Other: | Total # of Containers | Analyses Requested / Preservation Codes: Bioassay Screen | Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12949 | 7/10/2015 | 12:00pm | | X | X | | | | | | | 1 | X | 5 Day TAT |

**Turnaround Time Requested (TAT)** (please check): Standard ☐ Rush ☑
(Rush TAT is subject to laboratory approval and surcharges.)

Date results are needed: 5 day TAT

Rush results requested by (please check): E-Mail ☑ Phone ☐

E-mail Address: Larrystarkey@eurofinsus.com

Phone: 510-672-4074

**Data Package Options** (please check if required)

Type I (Validation/non-CLP) ☐ MA MCP ☐
Type III (Reduced non-CLP) ☐ CT RCP ☐
Type IV (CLP SOW) ☐ TX TRRP-13 ☐
Type VI (Raw Data Only) ☐

**EDD Required?** Yes ☐ No ☐ If yes, format: _____

| Relinquished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [signature] | 7/14/15 | 1200 | [signature] | 7/14/15 | 1200 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Relinquished by Commercial Carrier:
UPS _____ FedEx _____ Other _____

Temperature upon receipt _____ °C



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# Sample Receipt Checklist

| | | | |
|---|---|---|---|
| Client Name: | **Eurofins Lancaster Laboratories** | Date and Time Received: | **7/14/2015 2:59:33 PM** |
| Project Name: | **Oily Sludge- Hazardous** | LogIn Reviewed by: | Briana Cutino |
| WorkOrder №: | **1507456** Matrix: Sludge | Carrier: | Client Drop-In |

## Chain of Custody (COC) Information

| | | |
|---|---|---|
| Chain of custody present? | Yes ✔ | No ☐ |
| Chain of custody signed when relinquished and received? | Yes ✔ | No ☐ |
| Chain of custody agrees with sample labels? | Yes ✔ | No ☐ |
| Sample IDs noted by Client on COC? | Yes ✔ | No ☐ |
| Date and Time of collection noted by Client on COC? | Yes ✔ | No ☐ |
| Sampler's name noted on COC? | Yes ✔ | No ☐ |

## Sample Receipt Information

| | | | |
|---|---|---|---|
| Custody seals intact on shipping container/cooler? | Yes ✔ | No ☐ | NA ☐ |
| Shipping container/cooler in good condition? | Yes ✔ | No ☐ | |
| Samples in proper containers/bottles? | Yes ✔ | No ☐ | |
| Sample containers intact? | Yes ✔ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ✔ | No ☐ | |

## Sample Preservation and Hold Time (HT) Information

| | | | |
|---|---|---|---|
| All samples received within holding time? | Yes ✔ | No ☐ | |
| Sample/Temp Blank temperature | Temp: 4.4°C | | NA ☐ |
| Water - VOA vials have zero headspace / no bubbles? | Yes ☐ | No ☐ | NA ✔ |
| Sample labels checked for correct preservation? | Yes ✔ | No ☐ | |
| pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? | Yes ☐ | No ☐ | NA ✔ |
| Samples Received on Ice? | Yes ☐ | No ✔ | |

UCMR3 Samples:

| | | | |
|---|---|---|---|
| Total Chlorine tested and acceptable upon receipt for EPA 522? | Yes ☐ | No ☐ | NA ✔ |
| Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? | Yes ☐ | No ☐ | NA ✔ |

** NOTE: If the "No" box is checked, see comments below.*

Comments:

# McCampbell Analytical, Inc.

*"When Quality Counts"*

# Analytical Report

**WorkOrder:** 1507572

**Report Created for:** Eurofins Lancaster Laboratories

940 Hensley Street
Richmond, CA 94801

**Project Contact:** Larry Starkey
**Project P.O.:**
**Project Name:** Cont. Soil Non-RCRA

**Project Received:** 07/15/2015

Analytical Report reviewed & approved for release on 07/27/2015 by:

Angela Rydelius,
Laboratory Manager

***The report shall not be reproduced except in full, without the written approval of the laboratory. The analytical results relate only to the items tested. Results reported conform to the most current NELAP standards, where applicable, unless otherwise stated in the case narrative.***

ACCREDITED IN ACCORDANCE WITH nelac

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NELAP: 4033ORELAP ♦ ELAP: 1644 ♦ ISO/IEC: 17025:2005 ♦ WSDE: C972-11 ♦ ADEC: UST-098 ♦ UCMR3



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# Glossary of Terms & Qualifier Definitions

**Client:** Eurofins Lancaster Laboratories
**Project:** Cont. Soil Non-RCRA
**WorkOrder:** 1507572

## Glossary Abbreviation

| | |
|---|---|
| 95% Interval | 95% Confident Interval |
| DF | Dilution Factor |
| DI WET | (DISTLC) Waste Extraction Test using DI water |
| DISS | Dissolved (direct analysis of 0.45 µm filtered and acidified water sample) |
| DUP | Duplicate |
| EDL | Estimated Detection Limit |
| ITEF | International Toxicity Equivalence Factor |
| LCS | Laboratory Control Sample |
| MB | Method Blank |
| MB % Rec | % Recovery of Surrogate in Method Blank, if applicable |
| MDL | Method Detection Limit |
| ML | Minimum Level of Quantitation |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| N/A | Not Applicable |
| ND | Not detected at or above the indicated MDL or RL |
| NR | Data Not Reported due to matrix interference or insufficient sample amount. |
| PF | Prep Factor |
| RD | Relative Difference |
| RL | Reporting Limit (The RL is the lowest calibration standard in a multipoint calibration.) |
| RPD | Relative Percent Deviation |
| RRT | Relative Retention Time |
| SPK Val | Spike Value |
| SPKRef Val | Spike Reference Value |
| SPLP | Synthetic Precipitation Leachate Procedure |
| TCLP | Toxicity Characteristic Leachate Procedure |
| TEQ | Toxicity Equivalents |
| WET (STLC) | Waste Extraction Test (Soluble Threshold Limit Concentration) |

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http://www.mccampbell.com / E-mail: main@mccampbell.com

| | | |
|---|---|---|
| Eurofins Lancaster Laboratories | Client Project ID: Cont. Soil Non-RCRA | Date Sampled: 07/15/15 |
| 940 Hensley Street | | Date Received: 07/15/15 |
| | Client Contact: Larry Starkey | Date Extracted: 07/21/15-07/25/15 |
| Richmond, CA 94801 | Client P.O.: | Date Analyzed: 07/21/15-07/25/15 |

## CA Title 22 Acute Fish Bioassay Screen Test for Hazardous Waste

Extraction Method: CA DFG (Polisini & Miller) Analytical Method: CA DFG (Polisini & Miller) Work Order: 1507572

| | | | | | |
|---|---|---|---|---|---|
| Lab ID | 1507572-001A | Species | Pimephales promelas | Avg. Length (mm) | 31.9 |
| Client ID | 12959 | Common Name | Fathead Minnows | Avg. Weight (g) | 0.331 |
| Matrix | Soil | | | Max Weight (g) | 0.356 |
| Control Water | Soft Synthetic Water | | | Min Weight (g) | 0.31 |

| Concentration | Survival | | Dissolved O2 (mg/L) | | pH | | Temperature (°C) | | Comments | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | A | B | A | B | A | B | | |
| Control | 10 | 10 | 8.94 | 8.97 | 7.68 | 7.71 | 20.0 | 20.0 | Analyst: | WV |
| 250 mg/L | 10 | 10 | 8.79 | 8.82 | 8.01 | 8.04 | 20.0 | 20.0 | | |
| 500 mg/L | 10 | 10 | 8.81 | 8.86 | 8.19 | 8.22 | 20.0 | 20.0 | Date: | 7/21/2015 |
| 750 mg/L | 10 | 10 | 8.68 | 8.71 | 8.28 | 8.31 | 20.0 | 20.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.61 | 8.68 | 7.53 | 7.50 | 21.0 | 21.0 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.62 | 8.53 | 7.82 | 7.85 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 8.57 | 8.46 | 7.90 | 7.94 | 21.0 | 21.0 | Date: | 7/22/2015 |
| 750 mg/L | 10 | 10 | 8.50 | 8.42 | 7.97 | 8.04 | 21.0 | 21.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.36 | 8.44 | 7.39 | 7.35 | 20.2 | 20.2 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.29 | 8.33 | 7.51 | 7.57 | 20.2 | 20.2 | | |
| 500 mg/L | 10 | 10 | 8.25 | 8.20 | 7.43 | 7.48 | 20.2 | 20.2 | Date: | 7/23/2015 |
| 750 mg/L | 10 | 10 | 8.16 | 8.01 | 7.32 | 7.39 | 20.2 | 20.2 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.20 | 8.31 | 7.33 | 7.27 | 21.0 | 21.0 | Analyst: | AB |
| 250 mg/L | 10 | 10 | 8.16 | 8.19 | 7.13 | 7.20 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 8.05 | 8.01 | 7.08 | 7.14 | 21.0 | 21.0 | Date: | 7/24/2015 |
| 750 mg/L | 10 | 10 | 7.86 | 7.78 | 7.02 | 7.05 | 21.0 | 21.0 | Time: | 12:00 PM |
| Control | 10 | 10 | 8.15 | 8.22 | 7.21 | 7.18 | 21.0 | 21.0 | Analyst: | MAX |
| 250 mg/L | 10 | 10 | 8.05 | 8.11 | 7.02 | 7.13 | 21.0 | 21.0 | | |
| 500 mg/L | 10 | 10 | 7.93 | 7.89 | 6.97 | 7.08 | 21.0 | 21.0 | Date: | 7/25/2015 |
| 750 mg/L | 10 | 10 | 7.77 | 7.63 | 6.89 | 6.86 | 21.0 | 21.0 | Time: | 12:00 PM |

| | Initial | | Final | |
|---|---|---|---|---|
| | Control | 750 mg/L | Control | 750 mg/L |
| Hardness (mg/L as CaCO3) | 40 | 44 | 42 | 48 |
| Alkalinity (mg/L as CaCO3) | 29.16 | 38.92 | 35.96 | 54.12 |
| Conductivity (uS/cm) | 160.4 | 165.3 | 169.8 | 196.7 |
| Salinity (‰, ppt) | N/A | N/A | N/A | N/A |

**Result: Mortality <40% at 750mg/L. Therefore LC50>=500mg/L ('non-hazardous')**

96 LC50: N/A LC50 Method: N/A
95% Upper Confident Limit: N/A 95% Lower Confident Limit: N/A

CDPH ELAP 1644 ♦ NELAP 4033ORELAP AB Analyst's Initial Angela Rydelius, Lab Manager

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Pittsburg, CA 94565-1701
(925) 252-9262

# CHAIN-OF-CUSTODY RECORD



**WorkOrder: 1507572** **ClientCode: LLR**

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ EQuIS ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

**Report to:**
Larry Starkey
Eurofins Lancaster Laboratories
940 Hensley Street
Richmond, CA 94801
510-232-8894 FAX: 510-232-4913

Email: larrystarkey@eurofinsus.com
cc/3rd Party:
PO:
ProjectNo: Cont. Soil Non-RCRA

**Bill to:**
Kay Hower
Eurofins NSC US, Inc.
2425 New Holland Pike
Lancaster, PA 17601
apinvoices@lancasterlabs.com

**Requested TAT:** 3 days

***Date Received:*** 07/15/2015
***Date Printed:*** 07/27/2015

| Lab ID | Client ID | Matrix | Collection Date | Hold | Requested Tests (See legend below) 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1507572-001 | 12959 | Soil | 7/15/2015 13:00 | | A | | | | | | | | | | | |

**Test Legend:**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | FISHHAZSCREEN_S | 2 | | 3 | | 4 | | 5 | |
| 6 | | 7 | | 8 | | 9 | | 10 | |
| 11 | | 12 | | | | | | | |

**Prepared by: Jena Alfaro**

**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

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# WORK ORDER SUMMARY

**Client Name:** EUROFINS LANCASTER LABORATORIES
**Project:** Cont. Soil Non-RCRA
**Comments:**

**QC Level:** LEVEL 2
**Client Contact:** Larry Starkey
**Contact's Email:** larrystarkey@eurofinsus.com

**Work Order:** 1507572
**Date Received:** 7/15/2015

☐ WaterTrax ☐ WriteOn ☐ EDF ☐ Excel ☐ Fax ☑ Email ☐ HardCopy ☐ ThirdParty ☐ J-flag

| Lab ID | Client ID | Matrix | Test Name | Containers /Composites | Bottle & Preservative | De-chlorinated | Collection Date & Time | TAT | Sediment Content | Hold | SubOut |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1507572-001A | 12959 | Soil | Fish Bioassay Screen Test for Haz Waste | 1 | 8OZ GJ | ☐ | 7/15/2015 13:00 | 5 days | | ☐ | |

**NOTES:** **- STLC and TCLP extractions require 2 days to complete; therefore, all TATs begin after the extraction is completed (i.e., One-day TAT yields results in 3 days from sample submission).**

**- MAI assumes that all material present in the provided sampling container is considered part of the sample - MAI does not exclude any material from the sample prior to sample preparation unless requested in writing by the client.**

# Environmental Analysis Request/Chain of Custody

eurofins | Lancaster Laboratories Environmental

Acct. # 1507572

For Eurofins Lancaster Laboratories Environmental use only
Group # _____ Sample # _____
Instructions on reverse side correspond with circled numbers.

**RUSH**

374846

**1 Client Information**

| | |
|---|---|
| Client: Eurofins Lancaster Laboratories | Acct. #: |
| Project Name/#: Contaminated Soil non RCRA | PWSID #: |
| Project Manager: Larry Starkey | P.O. #: |
| Sampler: Fred Jacobs | Quote #: |
| Name of state where samples were collected: CA | |

**2 Sample Identification** | **3 Grab** | **Composite** | **4 Matrix** (Soil ☐ Sediment ☐ Water: Potable ☐ Ground ☐ NPDES ☐ Surface ☐ Other: ____) | **Total # of Containers** | **5 Analysis Requested** (Preservation Codes: Bioassay Screen)

| Sample Identification | Collected Date | Collected Time | Grab | Composite | Soil | Water | Other | Total # of Containers | Bioassay Screen |
|---|---|---|---|---|---|---|---|---|---|
| 12959 | 7/15/15 | 1300 | | X | X | | | 1 | X |

ICE/t° 5.0
GOOD CONDITION ____ APPROPRIATE
HEAD SPACE ABSENT ____ CONTAINERS ____
DECHLORINATED IN LAB ____ PRESERVED IN LAB ____
PRESERVATION ____ VOAS | O&G | METALS | OTHER

For Lab Use Only
FSC: ____
SCR#: ____

**Preservation Codes**
H=HCl T=Thiosulfate
N=$HNO_3$ B=NaOH
S=$H_2SO_4$ O=Other

**6 Remarks**
5 Day TAT

**7 Turnaround Time (TAT) Requested** (please circle)
Standard Rush
(Rush TAT is subject to laboratory approval and surcharge.)

Date results are needed: 5 Day TAT

E-mail address: LarryStarkey@eurofinsus.com

**8 Data Package Options** (circle if required)
Type I (Validation/non-CLP) Type VI (Raw Data Only)
Type III (Reduced non-CLP) TX TRRP-13
NYSDEC Category A or B MA MCP CT RCP

| Relinquished by | Date | Time | Received by | Date | Time |
|---|---|---|---|---|---|
| [signature] | 7/15/15 | 1625 | [signature] | 7/15/15 | 1625 |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

EDD Required? Yes No
If yes, format: ____
Site-Specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate sample volume.)

Relinquished by Commercial Carrier:
UPS ____ FedEx ____ Other ____
Temperature upon receipt ____ °C

Eurofins Lancaster Laboratories Environmental, LLC • 2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300
The white copy should accompany samples to Eurofins Lancaster Laboratories Environmental. The yellow copy should be retained by the client.

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http://www.mccampbell.com / E-mail: main@mccampbell.com

# Sample Receipt Checklist

| | | | |
|---|---|---|---|
| Client Name: | **Eurofins Lancaster Laboratories** | Date and Time Received: | **7/15/2015 8:08:54 PM** |
| Project Name: | **Cont. Soil Non-RCRA** | LogIn Reviewed by: | Jena Alfaro |
| WorkOrder №: | **1507572** Matrix: Soil | Carrier: | Client Drop-In |

## Chain of Custody (COC) Information

| | | |
|---|---|---|
| Chain of custody present? | Yes ✔ | No ☐ |
| Chain of custody signed when relinquished and received? | Yes ✔ | No ☐ |
| Chain of custody agrees with sample labels? | Yes ✔ | No ☐ |
| Sample IDs noted by Client on COC? | Yes ✔ | No ☐ |
| Date and Time of collection noted by Client on COC? | Yes ✔ | No ☐ |
| Sampler's name noted on COC? | Yes ✔ | No ☐ |

## Sample Receipt Information

| | | | |
|---|---|---|---|
| Custody seals intact on shipping container/cooler? | Yes ☐ | No ☐ | NA ✔ |
| Shipping container/cooler in good condition? | Yes ✔ | No ☐ | |
| Samples in proper containers/bottles? | Yes ✔ | No ☐ | |
| Sample containers intact? | Yes ✔ | No ☐ | |
| Sufficient sample volume for indicated test? | Yes ✔ | No ☐ | |

## Sample Preservation and Hold Time (HT) Information

| | | | |
|---|---|---|---|
| All samples received within holding time? | Yes ✔ | No ☐ | |
| Sample/Temp Blank temperature | Temp: 5°C | | NA ☐ |
| Water - VOA vials have zero headspace / no bubbles? | Yes ☐ | No ☐ | NA ✔ |
| Sample labels checked for correct preservation? | Yes ✔ | No ☐ | |
| pH acceptable upon receipt (Metal: <2; 522: <4; 218.7: >8)? | Yes ☐ | No ☐ | NA ✔ |
| Samples Received on Ice? | Yes ✔ | No ☐ | |
| | (Ice Type: WET ICE ) | | |

UCMR3 Samples:

| | | | |
|---|---|---|---|
| Total Chlorine tested and acceptable upon receipt for EPA 522? | Yes ☐ | No ☐ | NA ✔ |
| Free Chlorine tested and acceptable upon receipt for EPA 218.7, 300.1, 537, 539? | Yes ☐ | No ☐ | NA ✔ |

** NOTE: If the "No" box is checked, see comments below.*

Comments:

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

July 22, 2015

**Project: 12947/Bin Storage Area**

Submittal Date: 07/11/2015
Group Number: 1576099
PO Number: 0015063842
State of Sample Origin: CA

| Client Sample Description | Lancaster Labs (LL) # |
|---|---|
| 12947 P21024 Contam. Soil Non Haz Composite Soil | 7963376 |
| 12947 P21024 Contam. Soil Non Haz Composite Soil | 7963377 |
| 12947 P21024 Contam. Soil Non Haz Composite Soil | 7963378 |
| 12947 P21024 Contam. Soil Non Haz Composite Soil | 7963379 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

| | | |
|---|---|---|
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Douglas Hubbard |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Matt Diaz |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Rebecca Bowen |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Thelma Aquino |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Charmaine Ferraz |

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Respectfully Submitted,

Larry Starkey
Group Leader

(510) 232-8894

eurofins
Lancaster Laboratories Environmental
2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

# Analysis Report

Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807
BSA/TTLC

LL Sample # SW 7963376
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12947

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|---|
| GC/MS Volatiles | SW-846 8260B | | mg/kg | | mg/kg | |
| 10237 | Benzene | 71-43-2 | 0.17 | J | 0.026 | 51.98 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | | 0.21 | 51.98 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | | 0.052 | 51.98 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | | 0.052 | 51.98 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | | 0.052 | 51.98 |
| 10237 | Chloroform | 67-66-3 | N.D. | | 0.052 | 51.98 |
| 10237 | 1,2-Dibromoethane | 106-93-4 | N.D. | | 0.052 | 51.98 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | | 0.052 | 51.98 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | | 0.052 | 51.98 |
| 10237 | 1,4-Dioxane | 123-91-1 | N.D. | | 3.6 | 51.98 |
| 10237 | Ethylbenzene | 100-41-4 | 0.26 | | 0.052 | 51.98 |
| 10237 | n-Hexane | 110-54-3 | N.D. | | 0.052 | 51.98 |
| 10237 | Isopropylbenzene | 98-82-8 | 0.11 | J | 0.052 | 51.98 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | | 0.10 | 51.98 |
| 10237 | Styrene | 100-42-5 | N.D. | | 0.052 | 51.98 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | | 0.052 | 51.98 |
| 10237 | Toluene | 108-88-3 | 0.26 | | 0.052 | 51.98 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | | 0.052 | 51.98 |
| 10237 | 1,2,4-Trimethylbenzene | 95-63-6 | 3.0 | | 0.052 | 51.98 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | | 0.052 | 51.98 |
| 10237 | Xylene (Total) | 1330-20-7 | 1.3 | | 0.052 | 51.98 |
| GC/MS Semivolatiles | SW-846 8270C | | mg/kg | | mg/kg | |
| 10728 | Anthracene | 120-12-7 | 0.91 | | 0.17 | 10 |
| 10728 | Benzenethiol | 108-98-5 | N.D. | | 17 | 10 |
| 10728 | Benzo(a)anthracene | 56-55-3 | 0.61 | J | 0.17 | 10 |
| 10728 | Benzo(a)pyrene | 50-32-8 | 0.36 | J | 0.17 | 10 |
| 10728 | Benzo(b)fluoranthene | 205-99-2 | 0.71 | J | 0.17 | 10 |
| 10728 | Benzo(k)fluoranthene | 207-08-9 | 0.28 | J | 0.17 | 10 |
| 10728 | 1,1'-Biphenyl | 92-52-4 | N.D. | | 0.83 | 10 |
| 10728 | Butylbenzylphthalate | 85-68-7 | N.D. | | 3.3 | 10 |
| 10728 | Di-n-butylphthalate | 84-74-2 | N.D. | | 3.3 | 10 |
| 10728 | Chrysene | 218-01-9 | 1.8 | | 0.17 | 10 |
| 10728 | Dibenz(a,h)acridine | 226-36-8 | N.D. | | 1.7 | 10 |
| 10728 | Dibenz(a,h)anthracene | 53-70-3 | 0.29 | J | 0.17 | 10 |
| 10728 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | | 0.83 | 10 |
| 10728 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | | 0.83 | 10 |
| 10728 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | | 0.83 | 10 |
| 10728 | Diethylphthalate | 84-66-2 | N.D. | | 3.3 | 10 |
| 10728 | 7,12-Dimethylbenz[a]anthracene | 57-97-6 | N.D. | | 0.83 | 10 |
| 10728 | 2,4-Dimethylphenol | 105-67-9 | N.D. | | 0.83 | 10 |
| 10728 | Dimethylphthalate | 131-11-3 | N.D. | | 3.3 | 10 |
| 10728 | 2,4-Dinitrophenol | 51-28-5 | N.D. | | 15 | 10 |
| 10728 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | | 3.3 | 10 |
| 10728 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 3.3 | 10 |
| 10728 | Fluoranthene | 206-44-0 | 0.54 | J | 0.17 | 10 |
| 10728 | Hexachlorobenzene | 118-74-1 | N.D. | | 0.17 | 10 |
| 10728 | Hexachlorobutadiene | 87-68-3 | N.D. | | 0.83 | 10 |
| 10728 | Hexachloroethane | 67-72-1 | N.D. | | 1.7 | 10 |
| 10728 | Indene | 95-13-6 | N.D. | | 1.7 | 10 |

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# Analysis Report

Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807
BSA/TTLC

LL Sample # SW 7963376
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12947

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC/MS Semivolatiles** | **SW-846 8270C** | | **mg/kg** | **mg/kg** | |
| 10728 | 6-Methylchrysene | 1705-85-7 | N.D. | 1.7 | 10 |
| 10728 | 1-Methylnaphthalene | 90-12-0 | 4.2 | 0.17 | 10 |
| 10728 | 2-Methylnaphthalene | 91-57-6 | 4.1 | 0.17 | 10 |
| 10728 | 2-Methylphenol | 95-48-7 | N.D. | 0.83 | 10 |
| 10728 | 4-Methylphenol | 106-44-5 | N.D. | 0.83 | 10 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | |
| 10728 | Naphthalene | 91-20-3 | 2.0 | 0.17 | 10 |
| 10728 | Nitrobenzene | 98-95-3 | N.D. | 0.83 | 10 |
| 10728 | 4-Nitrophenol | 100-02-7 | N.D. | 8.3 | 10 |
| 10728 | Di-n-octylphthalate | 117-84-0 | N.D. | 3.3 | 10 |
| 10728 | Pentachlorophenol | 87-86-5 | N.D. | 1.7 | 10 |
| 10728 | Phenanthrene | 85-01-8 | 5.4 | 0.17 | 10 |
| 10728 | Phenol | 108-95-2 | N.D. | 0.83 | 10 |
| 10728 | Pyrene | 129-00-0 | 1.8 | 0.17 | 10 |
| 10728 | Pyridine | 110-86-1 | N.D. | 3.3 | 10 |
| 10728 | Quinoline | 91-22-5 | N.D. | 1.7 | 10 |
| 10728 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 0.83 | 10 |
| 10728 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 0.83 | 10 |
| | Reporting limits were raised due to interference from the sample matrix. | | | | |
| **GC Volatiles** | **SW-846 8015B** | | **mg/kg** | **mg/kg** | |
| 01637 | TPH-GRO soil C6-C10 | n.a. | 15 J | 8.3 | 1041.67 |
| | Reporting limits were raised due to sample foaming. | | | | |
| **GC Petroleum Hydrocarbons** | **SW-846 8015B** | | **mg/kg** | **mg/kg** | |
| 10941 | TPH-DRO soil C10-C28 microwave | n.a. | 22,000 | 1,200 | 100 |
| **Metals** | **SW-846 6010B** | | **mg/kg** | **mg/kg** | |
| 06944 | Antimony | 7440-36-0 | 10.8 | 0.330 | 1 |
| 06935 | Arsenic | 7440-38-2 | 24.4 | 0.640 | 1 |
| 06946 | Barium | 7440-39-3 | 115 | 0.0330 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.751 | 0.0670 | 1 |
| 06949 | Cadmium | 7440-43-9 | 15.3 | 0.0330 | 1 |
| 06951 | Chromium | 7440-47-3 | 167 | 0.110 | 1 |
| 06952 | Cobalt | 7440-48-4 | 15.1 | 0.0960 | 1 |
| 06953 | Copper | 7440-50-8 | 141 | 0.330 | 1 |
| 06955 | Lead | 7439-92-1 | 117 | 0.500 | 1 |
| 06960 | Molybdenum | 7439-98-7 | 6.54 | 0.170 | 1 |
| 06961 | Nickel | 7440-02-0 | 84.7 | 0.150 | 1 |
| 06936 | Selenium | 7782-49-2 | 9.71 | 0.440 | 1 |
| 06966 | Silver | 7440-22-4 | 4.93 | 0.190 | 1 |
| 06925 | Thallium | 7440-28-0 | 2.75 J | 0.800 | 1 |
| 06971 | Vanadium | 7440-62-2 | 70.1 | 0.0910 | 1 |
| 06972 | Zinc | 7440-66-6 | 1,830 | 1.30 | 5 |
| | **SW-846 7471A** | | **mg/kg** | **mg/kg** | |

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# Analysis Report

Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807
BSA/TTLC

LL Sample # SW 7963376
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12947

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **Metals** | | **SW-846 7471A** | **mg/kg** | **mg/kg** | |
| 00159 | Mercury | 7439-97-6 | 4.11 | 0.185 | 20 |
| **Wet Chemistry** | | **SW-846 9045C modified** | **Std. Units** | **Std. Units** | |
| 00394 | pH<br>The pH was measured in water at 19.7 C. | n.a. | 8.69 | 0.0100 | 1 |
| **Wet Chemistry** | | **SM 2540 G-1997** | **%** | **%** | |
| 00111 | Moisture<br>Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 38.6 | 0.50 | 1 |

## General Sample Comments

CA ELAP Lab Certification No. 2792
The analysis for Bioassay was subcontracted to another laboratory.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 10237 | VOCs- Solid by 8260B | SW-846 8260B | 1 | R151962AA | 07/15/2015 13:51 | Anita M Dale | 51.98 |
| 00374 | GC/MS - Bulk Soil Prep | SW-846 5035A Modified | 1 | 201519238232 | 07/11/2015 18:04 | Mitchell R Washel | n.a. |
| 00374 | GC/MS - Bulk Soil Prep | SW-846 5035A Modified | 2 | 201519238232 | 07/11/2015 18:04 | Mitchell R Washel | n.a. |
| 06646 | GC/MS HL Bulk Sample Prep | SW-846 5035A Modified | 1 | 201519238232 | 07/11/2015 17:16 | Mitchell R Washel | n.a. |
| 10728 | Skinner 8270 (microwave) | SW-846 8270C | 1 | 15194SLK026 | 07/17/2015 04:20 | Catherine E Bachman | 10 |
| 10812 | BNA Soil Microwave Skinner | SW-846 3546 | 1 | 15194SLK026 | 07/14/2015 09:15 | Katheryne V Dinan | 1 |
| 01637 | TPH-GRO soil C6-C10 | SW-846 8015B | 1 | 15194A31B | 07/14/2015 20:28 | Marie D Beamenderfer | 1041.67 |
| 01150 | GC - Bulk Soil Prep | SW-846 5035A Modified | 1 | 201519238232 | 07/11/2015 17:17 | Mitchell R Washel | n.a. |
| 10941 | TPH-DRO soil C10-C28 microwave | SW-846 8015B | 1 | 151940011A | 07/14/2015 18:49 | Christine E Dolman | 100 |
| 10942 | Microwave Extraction-DRO soils | SW-846 3546 | 1 | 151940011A | 07/13/2015 19:00 | David V Hershey Jr | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |

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# Analysis Report

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Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807
BSA/TTLC

LL Sample # SW 7963376
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12947

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 06947 | Beryllium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06960 | Molybdenum | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:35 | Joanne M Gates | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 151965708003 | 07/16/2015 08:02 | Joanne M Gates | 5 |
| 00159 | Mercury | SW-846 7471A | 1 | 151945711003 | 07/15/2015 09:32 | Damary Valentin | 20 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 151945708001 | 07/14/2015 10:35 | James L Mertz | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 2 | 151965708003 | 07/15/2015 21:20 | Annamaria Kuhns | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A modified | 1 | 151945711003 | 07/14/2015 14:15 | James L Mertz | 1 |
| 00394 | pH | SW-846 9045C modified | 1 | 15199039401A | 07/18/2015 12:00 | Luz M Groff | 1 |
| 00111 | Moisture | SM 2540 G-1997 | 1 | 15195820001A | 07/14/2015 22:15 | Scott W Freisher | 1 |

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# Analysis Report

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Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807 TCLP NVE
BSA/TCLP NON-VOA LEACH. EXT

LL Sample # TL 7963377
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2947N

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC/MS Semivolatiles** | | **SW-846 8270C** | **mg/l** | **mg/l** | |
| 00949 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.003 | 1 |
| 00949 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 0.005 | 1 |
| 00949 | Hexachlorobenzene | 118-74-1 | N.D. | 0.0005 | 1 |
| 00949 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.003 | 1 |
| 00949 | Hexachloroethane | 67-72-1 | N.D. | 0.005 | 1 |
| 00949 | 2-Methylphenol | 95-48-7 | N.D. | 0.003 | 1 |
| 00949 | 4-Methylphenol | 106-44-5 | N.D. | 0.003 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | |
| 00949 | Nitrobenzene | 98-95-3 | N.D. | 0.003 | 1 |
| 00949 | Pentachlorophenol | 87-86-5 | N.D. | 0.005 | 1 |
| 00949 | Pyridine | 110-86-1 | N.D. | 0.010 | 1 |
| 00949 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 0.003 | 1 |
| 00949 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 0.003 | 1 |
| **Metals** | | **SW-846 6010B** | **mg/l** | **mg/l** | |
| 07035 | Arsenic | 7440-38-2 | 0.0112 J | 0.0070 | 1 |
| 07046 | Barium | 7440-39-3 | 0.715 | 0.00030 | 1 |
| 07049 | Cadmium | 7440-43-9 | 0.00072 J | 0.00030 | 1 |
| 07051 | Chromium | 7440-47-3 | 0.0036 J | 0.0015 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0513 | 0.0051 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0082 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0014 | 1 |
| | | **SW-846 7470A** | **mg/l** | **mg/l** | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 1 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00949 | TCLP Acid Base/Neutrals | SW-846 8270C | 1 | 15198WAK026 | 07/20/2015 11:44 | Linda M Hartenstine | 1 |
| 04731 | TCLP Leachate Extraction | SW-846 3510C | 1 | 15198WAK026 | 07/18/2015 09:40 | Kelli M Barto | 1 |
| 07035 | Arsenic | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |

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# Analysis Report

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Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807 TCLP NVE
BSA/TCLP NON-VOA LEACH. EXT

LL Sample # TL 7963377
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2947N

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 07049 | Cadmium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:10 | Joanne M Gates | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 151985713001 | 07/22/2015 09:22 | Damary Valentin | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 151985705002 | 07/19/2015 10:31 | James L Mertz | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 151985713001 | 07/21/2015 08:32 | Katlin N Cataldi | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 15197-2486-094 7A | 07/16/2015 15:50 | Christina A Huber | n.a. |

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# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807 TCLP ZHE
BSA/TCLP ZERO HSP. EXT.

LL Sample # TL 7963378
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2947Z

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| GC/MS Volatiles | SW-846 8260B | | mg/l | mg/l | |
| 03636 | Benzene | 71-43-2 | N.D. | 0.010 | 20 |
| 03636 | 2-Butanone | 78-93-3 | N.D. | 0.060 | 20 |
| 03636 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.010 | 20 |
| 03636 | Chlorobenzene | 108-90-7 | N.D. | 0.010 | 20 |
| 03636 | Chloroform | 67-66-3 | N.D. | 0.010 | 20 |
| 03636 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.010 | 20 |
| 03636 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.010 | 20 |
| 03636 | Tetrachloroethene | 127-18-4 | N.D. | 0.010 | 20 |
| 03636 | Trichloroethene | 79-01-6 | N.D. | 0.010 | 20 |
| 03636 | Vinyl Chloride | 75-01-4 | N.D. | 0.010 | 20 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03636 | TCLP VOCs by 8260B | SW-846 8260B | 1 | N151981AA | 07/17/2015 18:55 | Daniel H Heller | 20 |
| 01163 | GC/MS VOA Water Prep | SW-846 5030B | 1 | N151981AA | 07/17/2015 18:55 | Daniel H Heller | 20 |
| 02573 | CA TCLP ZHE | SW-846 1311 | 1 | 15196-2486-2573 | 07/15/2015 15:15 | Christina A Huber | 1 |

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# Analysis Report

Sample Description: 12947 P21024 Contam. Soil Non Haz Composite Soil
Job#: 12312 Cost Ctr.: DCRR100807 STLC NVE
BSA/STLC WET LEACH. EXT.

LL Sample # TL 7963379
LL Group # 1576099
Account # 10845

Project Name: 12947/Bin Storage Area

Collected: 07/10/2015 09:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2947W

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **Metals** | | **SW-846 6010B** | **mg/l** | **mg/l** | |
| 07051 | Chromium | 7440-47-3 | 0.285 J | 0.0338 | 1.04 |
| 07055 | Lead | 7439-92-1 | 3.04 | 0.122 | 1.04 |
| | | **SW-846 7470A** | **mg/l** | **mg/l** | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.0021 | 1.04 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 07051 | Chromium | SW-846 6010B | 1 | 151975705002 | 07/17/2015 14:49 | Eric L Eby | 1.04 |
| 07055 | Lead | SW-846 6010B | 1 | 151975705002 | 07/17/2015 14:49 | Eric L Eby | 1.04 |
| 00259 | Mercury | SW-846 7470A | 2 | 151975713005 | 07/17/2015 15:22 | Parker D Lindstrom | 1.04 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 151975705002 | 07/16/2015 23:00 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 151975713005 | 07/17/2015 00:30 | Annamaria Kuhns | 1 |
| 01435 | Non-volatile WET | CCR Title 22 WET Sec 66700 | 1 | 15194-2486-1435 | 07/13/2015 09:43 | Christina A Huber | n.a. |

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# Quality Control Summary

Client Name: Chevron Products Company
Reported: 07/22/2015 12:38

Group Number: 1576099

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: N151981AA | Sample number(s): 7963378 | | | | | | | |
| Benzene | N.D. | 0.0005 | mg/l | 92 | 93 | 78-120 | 1 | 30 |
| 2-Butanone | N.D. | 0.003 | mg/l | 86 | 89 | 54-133 | 4 | 30 |
| Carbon Tetrachloride | N.D. | 0.0005 | mg/l | 110 | 108 | 74-130 | 2 | 30 |
| Chlorobenzene | N.D. | 0.0005 | mg/l | 102 | 101 | 80-120 | 1 | 30 |
| Chloroform | N.D. | 0.0005 | mg/l | 99 | 100 | 80-120 | 1 | 30 |
| 1,2-Dichloroethane | N.D. | 0.0005 | mg/l | 106 | 106 | 72-127 | 1 | 30 |
| 1,1-Dichloroethene | N.D. | 0.0005 | mg/l | 92 | 93 | 76-124 | 1 | 30 |
| Tetrachloroethene | N.D. | 0.0005 | mg/l | 104 | 104 | 80-120 | 0 | 30 |
| Trichloroethene | N.D. | 0.0005 | mg/l | 101 | 100 | 80-120 | 1 | 30 |
| Vinyl Chloride | N.D. | 0.0005 | mg/l | 83 | 89 | 69-120 | 6 | 30 |
| Batch number: R151962AA | Sample number(s): 7963376 | | | | | | | |
| Benzene | N.D. | 0.025 | mg/kg | 101 | 95 | 80-120 | 6 | 30 |
| 2-Butanone | N.D. | 0.20 | mg/kg | 90 | 88 | 62-123 | 3 | 30 |
| Carbon Disulfide | N.D. | 0.050 | mg/kg | 98 | 91 | 52-126 | 8 | 30 |
| Carbon Tetrachloride | N.D. | 0.050 | mg/kg | 99 | 95 | 69-130 | 5 | 30 |
| Chlorobenzene | N.D. | 0.050 | mg/kg | 109 | 105 | 80-120 | 4 | 30 |
| Chloroform | N.D. | 0.050 | mg/kg | 101 | 94 | 80-120 | 8 | 30 |
| 1,2-Dibromoethane | N.D. | 0.050 | mg/kg | 106 | 102 | 80-120 | 4 | 30 |
| 1,2-Dichloroethane | N.D. | 0.050 | mg/kg | 100 | 96 | 77-130 | 4 | 30 |
| 1,1-Dichloroethene | N.D. | 0.050 | mg/kg | 100 | 92 | 73-129 | 8 | 30 |
| 1,4-Dioxane | N.D. | 3.5 | mg/kg | 120 | 132* | 58-124 | 10 | 30 |
| Ethylbenzene | N.D. | 0.050 | mg/kg | 108 | 103 | 80-120 | 5 | 30 |
| n-Hexane | N.D. | 0.050 | mg/kg | 113 | 101 | 44-120 | 11 | 30 |
| Isopropylbenzene | N.D. | 0.050 | mg/kg | 106 | 99 | 76-120 | 6 | 30 |
| Methylene Chloride | N.D. | 0.10 | mg/kg | 102 | 90 | 80-124 | 13 | 30 |
| Styrene | N.D. | 0.050 | mg/kg | 101 | 95 | 76-120 | 6 | 30 |
| Tetrachloroethene | N.D. | 0.050 | mg/kg | 102 | 99 | 78-120 | 3 | 30 |
| Toluene | N.D. | 0.050 | mg/kg | 111 | 106 | 80-120 | 5 | 30 |
| Trichloroethene | N.D. | 0.050 | mg/kg | 100 | 94 | 80-120 | 6 | 30 |
| 1,2,4-Trimethylbenzene | N.D. | 0.050 | mg/kg | 110 | 104 | 79-120 | 6 | 30 |
| Vinyl Chloride | N.D. | 0.050 | mg/kg | 85 | 77 | 59-120 | 10 | 30 |
| Xylene (Total) | N.D. | 0.050 | mg/kg | 107 | 101 | 80-120 | 5 | 30 |
| Batch number: 15194SLK026 | Sample number(s): 7963376 | | | | | | | |
| Anthracene | N.D. | 0.0033 | mg/kg | 105 | | 82-118 | | |
| Benzenethiol | N.D. | 0.33 | mg/kg | | | | | |
| Benzo(a)anthracene | N.D. | 0.0033 | mg/kg | 95 | | 76-119 | | |
| Benzo(a)pyrene | N.D. | 0.0033 | mg/kg | 93 | | 85-117 | | |
| Benzo(b)fluoranthene | N.D. | 0.0033 | mg/kg | 93 | | 78-129 | | |
| Benzo(k)fluoranthene | N.D. | 0.0033 | mg/kg | 103 | | 79-120 | | |
| 1,1'-Biphenyl | N.D. | 0.017 | mg/kg | 102 | | 78-111 | | |
| Butylbenzylphthalate | N.D. | 0.067 | mg/kg | 94 | | 80-118 | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company
Reported: 07/22/2015 12:38

Group Number: 1576099

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Di-n-butylphthalate | N.D. | 0.067 | mg/kg | 99 | | 84-120 | | |
| Chrysene | N.D. | 0.0033 | mg/kg | 99 | | 80-121 | | |
| Dibenz(a,h)acridine | N.D. | 0.033 | mg/kg | 103 | | 73-137 | | |
| Dibenz(a,h)anthracene | N.D. | 0.0033 | mg/kg | 93 | | 81-123 | | |
| 1,2-Dichlorobenzene | N.D. | 0.017 | mg/kg | 93 | | 79-112 | | |
| 1,3-Dichlorobenzene | N.D. | 0.017 | mg/kg | 92 | | 79-113 | | |
| 1,4-Dichlorobenzene | N.D. | 0.017 | mg/kg | 92 | | 79-112 | | |
| Diethylphthalate | N.D. | 0.067 | mg/kg | 98 | | 81-118 | | |
| 7,12-Dimethylbenz[a]anthracene | N.D. | 0.017 | mg/kg | 97 | | 85-116 | | |
| 2,4-Dimethylphenol | N.D. | 0.017 | mg/kg | 99 | | 83-120 | | |
| Dimethylphthalate | N.D. | 0.067 | mg/kg | 101 | | 82-113 | | |
| 2,4-Dinitrophenol | N.D. | 0.30 | mg/kg | 68 | | 47-130 | | |
| 2,4-Dinitrotoluene | N.D. | 0.067 | mg/kg | 100 | | 81-122 | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 0.067 | mg/kg | 91 | | 81-121 | | |
| Fluoranthene | N.D. | 0.0033 | mg/kg | 98 | | 81-117 | | |
| Hexachlorobenzene | N.D. | 0.0033 | mg/kg | 101 | | 75-123 | | |
| Hexachlorobutadiene | N.D. | 0.017 | mg/kg | 100 | | 78-121 | | |
| Hexachloroethane | N.D. | 0.033 | mg/kg | 91 | | 78-114 | | |
| Indene | N.D. | 0.033 | mg/kg | 95 | | 83-116 | | |
| 6-Methylchrysene | N.D. | 0.033 | mg/kg | 94 | | 77-108 | | |
| 1-Methylnaphthalene | N.D. | 0.0033 | mg/kg | 98 | | 77-115 | | |
| 2-Methylnaphthalene | N.D. | 0.0033 | mg/kg | 95 | | 83-109 | | |
| 2-Methylphenol | N.D. | 0.017 | mg/kg | 104 | | 82-125 | | |
| 4-Methylphenol | N.D. | 0.017 | mg/kg | 94 | | 75-119 | | |
| Naphthalene | N.D. | 0.0033 | mg/kg | 99 | | 83-112 | | |
| Nitrobenzene | N.D. | 0.017 | mg/kg | 99 | | 80-115 | | |
| 4-Nitrophenol | N.D. | 0.17 | mg/kg | 88 | | 60-129 | | |
| Di-n-octylphthalate | N.D. | 0.067 | mg/kg | 99 | | 82-134 | | |
| Pentachlorophenol | N.D. | 0.033 | mg/kg | 107 | | 57-126 | | |
| Phenanthrene | N.D. | 0.0033 | mg/kg | 99 | | 80-114 | | |
| Phenol | N.D. | 0.017 | mg/kg | 104 | | 75-117 | | |
| Pyrene | N.D. | 0.0033 | mg/kg | 98 | | 81-114 | | |
| Pyridine | N.D. | 0.067 | mg/kg | 74 | | 55-118 | | |
| Quinoline | N.D. | 0.033 | mg/kg | 96 | | 84-111 | | |
| 2,4,5-Trichlorophenol | N.D. | 0.017 | mg/kg | 101 | | 86-123 | | |
| 2,4,6-Trichlorophenol | N.D. | 0.017 | mg/kg | 105 | | 81-123 | | |
| Batch number: 15198WAK026 | Sample number(s): 7963377 | | | | | | | |
| 1,4-Dichlorobenzene | N.D. | 0.003 | mg/l | 85 | | 56-106 | | |
| 2,4-Dinitrotoluene | N.D. | 0.005 | mg/l | 94 | | 77-124 | | |
| Hexachlorobenzene | N.D. | 0.0005 | mg/l | 108 | | 73-118 | | |
| Hexachlorobutadiene | N.D. | 0.003 | mg/l | 87 | | 42-110 | | |
| Hexachloroethane | N.D. | 0.005 | mg/l | 80 | | 43-108 | | |
| 2-Methylphenol | N.D. | 0.003 | mg/l | 85 | | 66-112 | | |
| 4-Methylphenol | N.D. | 0.003 | mg/l | 79 | | 56-109 | | |
| Nitrobenzene | N.D. | 0.003 | mg/l | 87 | | 77-119 | | |
| Pentachlorophenol | N.D. | 0.005 | mg/l | 108 | | 50-121 | | |
| Pyridine | N.D. | 0.010 | mg/l | 58 | | 22-96 | | |
| 2,4,5-Trichlorophenol | N.D. | 0.003 | mg/l | 92 | | 76-116 | | |
| 2,4,6-Trichlorophenol | N.D. | 0.003 | mg/l | 100 | | 75-117 | | |
| Batch number: 15194A31B | Sample number(s): 7963376 | | | | | | | |
| TPH-GRO soil C6-C10 | N.D. | 0.2 | mg/kg | 86 | 87 | 61-120 | 1 | 30 |
| Batch number: 151940011A | Sample number(s): 7963376 | | | | | | | |
| TPH-DRO soil C10-C28 microwave | N.D. | 4.0 | mg/kg | 96 | | 81-121 | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576099
Reported: 07/22/2015 12:38

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 151945711003 | Sample number(s): 7963376 | | | | | | | |
| Mercury | N.D. | 0.0100 | mg/kg | 100 | | 80-120 | | |
| Batch number: 151965708003 | Sample number(s): 7963376 | | | | | | | |
| Antimony | N.D. | 0.330 | mg/kg | 102 | | 80-120 | | |
| Arsenic | N.D. | 0.640 | mg/kg | 99 | | 80-120 | | |
| Barium | N.D. | 0.0330 | mg/kg | 103 | | 80-120 | | |
| Beryllium | N.D. | 0.0670 | mg/kg | 110 | | 80-120 | | |
| Cadmium | N.D. | 0.0330 | mg/kg | 99 | | 80-120 | | |
| Chromium | N.D. | 0.110 | mg/kg | 101 | | 80-120 | | |
| Cobalt | N.D. | 0.0960 | mg/kg | 98 | | 80-120 | | |
| Copper | N.D. | 0.330 | mg/kg | 102 | | 80-120 | | |
| Lead | N.D. | 0.500 | mg/kg | 100 | | 80-120 | | |
| Molybdenum | N.D. | 0.170 | mg/kg | 99 | | 80-120 | | |
| Nickel | N.D. | 0.150 | mg/kg | 103 | | 80-120 | | |
| Selenium | N.D. | 0.440 | mg/kg | 98 | | 80-120 | | |
| Silver | N.D. | 0.190 | mg/kg | 95 | | 80-120 | | |
| Thallium | N.D. | 0.800 | mg/kg | 102 | | 80-120 | | |
| Vanadium | N.D. | 0.0910 | mg/kg | 106 | | 80-120 | | |
| Zinc | N.D. | 0.260 | mg/kg | 98 | | 80-120 | | |
| Batch number: 151975705002 | Sample number(s): 7963379 | | | | | | | |
| Chromium | N.D. | 0.0325 | mg/l | 98 | | 80-120 | | |
| Lead | N.D. | 0.118 | mg/l | 95 | | 80-120 | | |
| Batch number: 151975713005 | Sample number(s): 7963379 | | | | | | | |
| Mercury | N.D. | 0.0020 | mg/l | 98 | | 80-120 | | |
| Batch number: 151985705002 | Sample number(s): 7963377 | | | | | | | |
| Arsenic | N.D. | 0.0070 | mg/l | 114 | | 80-120 | | |
| Barium | 0.00066 J | 0.00030 | mg/l | 95 | | 80-120 | | |
| Cadmium | 0.00041 J | 0.00030 | mg/l | 100 | | 80-120 | | |
| Chromium | 0.0016 J | 0.0015 | mg/l | 101 | | 80-120 | | |
| Lead | N.D. | 0.0051 | mg/l | 96 | | 80-120 | | |
| Selenium | N.D. | 0.0082 | mg/l | 114 | | 80-120 | | |
| Silver | N.D. | 0.0014 | mg/l | 102 | | 80-120 | | |
| Batch number: 151985713001 | Sample number(s): 7963377 | | | | | | | |
| Mercury | N.D. | 0.00005 0 | mg/l | 100 | | 80-120 | | |
| Batch number: 15199039401A | Sample number(s): 7963376 | | | | | | | |
| pH | | | | 100 | | 95-105 | | |
| Batch number: 15195820001A | Sample number(s): 7963376 | | | | | | | |
| Moisture | | | | 100 | | 99-101 | | |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| | MS | MSD | MS/MSD | RPD | BKG | DUP | DUP | Dup RPD |
|---|---|---|---|---|---|---|---|---|

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576099
Reported: 07/22/2015 12:38

| Analysis Name | %REC | %REC | Limits | RPD | MAX | Conc | Conc | RPD | Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: N151981AA | Sample number(s): 7963378 UNSPK: P958613 | | | | | | | | |
| Benzene | 101 | 102 | 72-134 | 1 | 30 | | | | |
| 2-Butanone | 94 | 94 | 44-135 | 0 | 30 | | | | |
| Carbon Tetrachloride | 111 | 109 | 75-148 | 2 | 30 | | | | |
| Chlorobenzene | 107 | 107 | 87-124 | 0 | 30 | | | | |
| Chloroform | 101 | 101 | 81-134 | 0 | 30 | | | | |
| 1,2-Dichloroethane | 101 | 99 | 63-142 | 1 | 30 | | | | |
| 1,1-Dichloroethene | 102 | 103 | 79-137 | 1 | 30 | | | | |
| Tetrachloroethene | 112 | 113 | 80-128 | 1 | 30 | | | | |
| Trichloroethene | 110 | 107 | 88-133 | 3 | 30 | | | | |
| Vinyl Chloride | 100 | 95 | 66-133 | 5 | 30 | | | | |
| Batch number: 15194SLK026 | Sample number(s): 7963376 UNSPK: 7963376 | | | | | | | | |
| Anthracene | 183* | 61 | 42-147 | 68* | 30 | | | | |
| Benzo(a)anthracene | 150 | 74 | 32-150 | 51* | 30 | | | | |
| Benzo(a)pyrene | 132 | 90 | 36-151 | 31* | 30 | | | | |
| Benzo(b)fluoranthene | 114 | 57 | 29-150 | 44* | 30 | | | | |
| Benzo(k)fluoranthene | 87 | 80 | 35-146 | 7 | 30 | | | | |
| 1,1'-Biphenyl | 123 | 103 | 34-145 | 17 | 30 | | | | |
| Butylbenzylphthalate | 0* | 0* | 50-137 | 0 | 30 | | | | |
| Di-n-butylphthalate | 0* | 0* | 65-126 | 0 | 30 | | | | |
| Chrysene | 252* | 42 | 28-146 | 82* | 30 | | | | |
| Dibenz(a,h)acridine | 162* | 138 | 10-159 | 16 | 30 | | | | |
| Dibenz(a,h)anthracene | 131 | 104 | 38-156 | 20 | 30 | | | | |
| 1,2-Dichlorobenzene | 100 | 103 | 51-130 | 3 | 30 | | | | |
| 1,3-Dichlorobenzene | 92 | 99 | 51-125 | 8 | 30 | | | | |
| 1,4-Dichlorobenzene | 97 | 95 | 50-127 | 1 | 30 | | | | |
| Diethylphthalate | 0* | 0* | 61-124 | 0 | 30 | | | | |
| 7,12-Dimethylbenz[a]anthracene | 308* | 131* | 62-117 | 81* | 30 | | | | |
| 2,4-Dimethylphenol | 122 | 101 | 38-140 | 18 | 30 | | | | |
| Dimethylphthalate | 0* | 0* | 59-124 | 0 | 30 | | | | |
| 2,4-Dinitrophenol | 0* | 0* | 20-143 | 0 | 30 | | | | |
| 2,4-Dinitrotoluene | 0* | 0* | 37-149 | 0 | 30 | | | | |
| bis(2-Ethylhexyl)phthalate | 0* | 0* | 60-133 | 0 | 30 | | | | |
| Fluoranthene | 171* | 74 | 41-135 | 62* | 30 | | | | |
| Hexachlorobenzene | 104 | 88 | 36-150 | 16 | 30 | | | | |
| Hexachlorobutadiene | 109 | 95 | 65-125 | 13 | 30 | | | | |
| Hexachloroethane | 0* | 0* | 37-143 | 0 | 30 | | | | |
| Indene | 107 | 0* | 44-124 | 200* | 30 | | | | |
| 6-Methylchrysene | 217* | 123* | 61-120 | 55* | 30 | | | | |
| 1-Methylnaphthalene | 258* | -63* | 68-121 | 92* | 30 | | | | |
| 2-Methylnaphthalene | 298* | -63* | 39-140 | 99* | 30 | | | | |
| 2-Methylphenol | 106 | 107 | 36-149 | 2 | 30 | | | | |
| 4-Methylphenol | 85 | 80 | 46-135 | 6 | 30 | | | | |
| Naphthalene | 177* | 29* | 39-147 | 67* | 30 | | | | |
| Nitrobenzene | 133* | 99 | 54-131 | 28 | 30 | | | | |
| 4-Nitrophenol | 0* | 0* | 25-142 | 0 | 30 | | | | |
| Di-n-octylphthalate | 0* | 0* | 53-156 | 0 | 30 | | | | |
| Pentachlorophenol | 0* | 0* | 23-145 | 0 | 30 | | | | |
| Phenanthrene | 465* | -104* | 42-141 | 113* | 30 | | | | |
| Phenol | 106 | 95 | 53-129 | 11 | 30 | | | | |
| Pyrene | 210* | 22* | 37-140 | 83* | 30 | | | | |
| Pyridine | 0* | 0* | 24-119 | 0 | 30 | | | | |
| Quinoline | 0* | 0* | 10-175 | 0 | 30 | | | | |
| 2,4,5-Trichlorophenol | 100 | 96 | 42-144 | 3 | 30 | | | | |
| 2,4,6-Trichlorophenol | 98 | 91 | 43-145 | 7 | 30 | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576099
Reported: 07/22/2015 12:38

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 15198WAK026 | Sample number(s): 7963377 UNSPK: P966095 | | | | | | | | |
| 1,4-Dichlorobenzene | 82 | 81 | 51-108 | 2 | 30 | | | | |
| 2,4-Dinitrotoluene | 90 | 91 | 51-145 | 1 | 30 | | | | |
| Hexachlorobenzene | 101 | 105 | 71-119 | 3 | 30 | | | | |
| Hexachlorobutadiene | 88 | 87 | 44-113 | 1 | 30 | | | | |
| Hexachloroethane | 78 | 77 | 32-120 | 2 | 30 | | | | |
| 2-Methylphenol | 83 | 85 | 27-132 | 2 | 30 | | | | |
| 4-Methylphenol | 79 | 81 | 13-128 | 2 | 30 | | | | |
| Nitrobenzene | 83 | 84 | 50-143 | 2 | 30 | | | | |
| Pentachlorophenol | 30 | 54 | 23-140 | 54* | 30 | | | | |
| Pyridine | 56 | 49 | 20-91 | 14 | 30 | | | | |
| 2,4,5-Trichlorophenol | 77 | 84 | 34-143 | 9 | 30 | | | | |
| 2,4,6-Trichlorophenol | 79 | 89 | 19-162 | 13 | 30 | | | | |
| Batch number: 151940011A | Sample number(s): 7963376 UNSPK: P960740 BKG: P960740 | | | | | | | | |
| TPH-DRO soil C10-C28 microwave | 92 | | 35-129 | | | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 151945711003 | Sample number(s): 7963376 UNSPK: P963417 BKG: P963417 | | | | | | | | |
| Mercury | 123* | 108 | 80-120 | 8 | 20 | 0.0830 J | 0.0901 J | 8 (1) | 20 |
| Batch number: 151965708003 | Sample number(s): 7963376 UNSPK: P962360 BKG: P962360 | | | | | | | | |
| Antimony | 92 | 92 | 75-125 | 1 | 20 | 0.962 J | 0.978 J | 2 (1) | 20 |
| Arsenic | 98 | 98 | 75-125 | 0 | 20 | 1.93 J | 2.25 | 15 (1) | 20 |
| Barium | 106 | 108 | 75-125 | 2 | 20 | 28.9 | 30.8 | 7 | 20 |
| Beryllium | 110 | 111 | 75-125 | 0 | 20 | 0.392 J | 0.360 J | 9 (1) | 20 |
| Cadmium | 94 | 93 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Chromium | 111 | 110 | 75-125 | 0 | 20 | 5.20 | 5.22 | 0 (1) | 20 |
| Cobalt | 96 | 96 | 75-125 | 0 | 20 | 4.52 | 4.90 | 8 | 20 |
| Copper | 102 | 105 | 75-125 | 2 | 20 | 3.64 | 3.61 | 1 (1) | 20 |
| Lead | 102 | 100 | 75-125 | 1 | 20 | 5.40 | 5.28 | 2 (1) | 20 |
| Molybdenum | 96 | 95 | 75-125 | 1 | 20 | 0.307 J | 0.207 J | 39* (1) | 20 |
| Nickel | 102 | 102 | 75-125 | 0 | 20 | 5.88 | 6.79 | 14 | 20 |
| Selenium | 95 | 93 | 75-125 | 2 | 20 | 2.27 | 2.02 | 12 (1) | 20 |
| Silver | 98 | 97 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Thallium | 98 | 98 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Vanadium | 110 | 111 | 75-125 | 1 | 20 | 8.47 | 7.83 | 8 | 20 |
| Zinc | 101 | 100 | 75-125 | 1 | 20 | 17.1 | 16.5 | 3 | 20 |
| Batch number: 151975705002 | Sample number(s): 7963379 UNSPK: 7963379 BKG: 7963379 | | | | | | | | |
| Chromium | 101 | 100 | 75-125 | 1 | 20 | 0.285 J | 0.297 J | 4 (1) | 20 |
| Lead | 98 | 97 | 75-125 | 1 | 20 | 3.04 | 3.00 | 1 | 20 |
| Batch number: 151975713005 | Sample number(s): 7963379 UNSPK: 7963379 BKG: 7963379 | | | | | | | | |
| Mercury | 101 | 101 | 80-120 | 0 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 151985705002 | Sample number(s): 7963377 UNSPK: P966095 BKG: P966095 | | | | | | | | |
| Arsenic | 106 | 106 | 75-125 | 0 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Barium | 4* | 4* | 75-125 | 6 | 20 | 0.0776 | 0.0795 | 3 | 20 |
| Cadmium | 86 | 86 | 75-125 | 0 | 20 | 0.0063 | 0.0063 | 1 (1) | 20 |
| Chromium | 86 | 86 | 75-125 | 0 | 20 | 0.0142 J | 0.0153 | 7 (1) | 20 |
| Lead | 64* | 63* | 75-125 | 1 | 20 | 0.0063 J | 0.0089 J | 34* (1) | 20 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company
Reported: 07/22/2015 12:38

Group Number: 1576099

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Selenium | 112 | 112 | 75-125 | 0 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Silver | 99 | 101 | 75-125 | 2 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 151985713001 | Sample number(s): 7963377 UNSPK: P966095 BKG: P966095 | | | | | | | | |
| Mercury | 87 | 86 | 80-120 | 1 | 20 | 0.00016 J | 0.00017 J | 7 (1) | 20 |
| Batch number: 15199039401A | Sample number(s): 7963376 BKG: P971177 | | | | | | | | |
| pH | | | | | | 8.99 | 8.95 | 0 | 3 |
| Batch number: 15195820001A | Sample number(s): 7963376 BKG: P956383 | | | | | | | | |
| Moisture | | | | | | 24.0 | 23.4 | 2 | 5 |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TCLP VOCs by 8260B
Batch number: N151981AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---|---|---|---|---|
| 7963378 | 106 | 104 | 99 | 93 |
| Blank | 116 | 110 | 99 | 93 |
| LCS | 108 | 103 | 102 | 102 |
| LCSD | 108 | 105 | 102 | 101 |
| MS | 104 | 103 | 103 | 100 |
| MSD | 104 | 101 | 103 | 101 |
| Limits: | 80-116 | 77-113 | 80-113 | 78-113 |

Analysis Name: VOCs- Solid by 8260B
Batch number: R151962AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---|---|---|---|---|
| 7963376 | 63 | 65 | 57 | 53 |
| Blank | 77 | 84 | 91 | 84 |
| LCS | 84 | 88 | 97 | 92 |
| LCSD | 77 | 81 | 89 | 84 |
| Limits: | 50-141 | 54-135 | 52-141 | 50-131 |

Analysis Name: Skinner 8270 (microwave)
Batch number: 15194SLK026

| | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|---|---|---|
| 7963376 | 82 | 88 | 76 | 81 | 95 | 80 |
| Blank | 94 | 100 | 103 | 94 | 96 | 74 |
| LCS | 97 | 98 | 102 | 91 | 97 | 73 |
| MS | 76 | 83 | 78 | 86 | 90 | 74 |
| MSD | 79 | 88 | 70 | 81 | 85 | 66 |
| Limits: | 58-122 | 57-128 | 36-142 | 54-123 | 63-124 | 61-142 |

Analysis Name: TCLP Acid Base/Neutrals

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576099
Reported: 07/22/2015 12:38

## Surrogate Quality Control

Batch number: 15198WAK026

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol |
|---|---|---|---|---|---|---|
| 7963377 | 74 | 80 | 74 | 20 | 32 | 74 |
| Blank | 81 | 86 | 93 | 33 | 56 | 92 |
| LCS | 79 | 87 | 94 | 34 | 56 | 87 |
| MS | 77 | 84 | 86 | 36 | 56 | 70 |
| MSD | 78 | 83 | 90 | 38 | 59 | 77 |
| Limits: | 60-123 | 61-112 | 35-144 | 10-82 | 10-107 | 23-145 |

Analysis Name: TPH-GRO soil C6-C10
Batch number: 15194A31B

| | Trifluorotoluene-F |
|---|---|
| 7963376 | 89 |
| Blank | 104 |
| LCS | 111 |
| LCSD | 112 |
| Limits: | 50-142 |

Analysis Name: TPH-DRO soil C10-C28 microwave
Batch number: 151940011A

| | Orthoterphenyl |
|---|---|
| 7963376 | 325* |
| Blank | 92 |
| DUP | 93 |
| LCS | 90 |
| MS | 87 |
| Limits: | 54-145 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Chevron Richmond Refinery HES/HW Workgroup - Analytical Request / Chain of Custody

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COC# Ø71Ø15-Ø4 For Lancaster Laboratories use only Acct. # 10845 Grp. # 1576099 Sample #: 7963376-79

ject Name: Contaminated Soil non Hazardous
urce (Vessel & Plant Name) S4028 - Excavate area to expose
U: HW Job # 12312
cation of Material: Bin storage Area
mpany Code: 0061 Richmond Refinery
S Element or Cost Center: DCRR100807
mple Requestor: Thelma Aquino
mpler(s) Name: Fred Jacobs / Clinton Hendricks
te of Origin: CA

Preservative Codes: Ø = None, S = H2SO4, N = HNO3, B = NaOH, H = HCl, O = Other

Listed Waste: YES / NO (NO circled)

Comments/Hazards

| mple Identification | Tank or Drum # | Date Collected | Time Collected | Grab | Composite | Matrix: Soil ☒ | Matrix: Water ☐ Oil ☐ Other Liquid ☐ | Total Number of Containers | EPA 8260 BTEX ☐ Total Benzene ☒ | CCR Metals STLC ☐ Rush STLC ☒ No STLC ☐ | TCLP Metals ☐ Benzene ☐ Full ☒ | Ignitability (solids) ☐ Flashpoint ☐ | Reactivity | 25D | TPH - GRO/DRO | SKINNER LIST: VOL 8260 | SKINNER LIST: SVOL 8270 | pH | % MOISTURE | | Bioassay Screen: Alpha ☐ McCampbell ☒ | Dioxin: TCDD 2,3,7,8 ☐ Full List ☐ | TVP ☐ Sulfide ☐ Asbestos ☐ | Other Subcontract | Other Remarks: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12947 | P21024 | 7.10.15 | 9:00pm | | X | X | | J | X | X | X | | | | X | X | X | X | X | | X | | | | |

*Shipped by Chevron ☐ *Shipped by LLI ☐ as # _____ of Dangerous Goods Shipments

| quished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [signature] | 7.10.15 | 1:35pm | [signature] | 1ØJUL15 | 14ØØ |
| quished by: [signature] | 1ØJUL15 | 163Ø | Received by: Airborne / FedEx | | |
| quished by Commercial Carrier: irborne FedEx | | | Received by: [signature] | 7.11.15 | 9:35 |

Desired Completion Date: _____ or

| Turn Around Time (TAT) | (Circle one) |
|---|---|
| NOTE: Rush Surcharges apply | 1 day |
| for all requests less than | 3 day |
| 10 working days | 5 day |
| TAT Clock starts when received at LLI | 10 day |

erature Upon Receipt 1.3-2.5 °C Custody Seals Intact? Yes No

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300
Page 18 of 20

ED_001593_00025843

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# Sample Administration Receipt Documentation Log

Doc Log ID: 86019

Group Number(s): 1576099

Client: CA OFFICE

## Contaminated Soil non Hazardous

### Delivery and Receipt Information

| | | | |
|---|---|---|---|
| Delivery Method: | BASC | Arrival Timestamp: | 07/11/2015 9:35 |
| Number of Packages: | 4 | Number of Projects: | 7 |
| State/Province of Origin: | CA | | |

### Arrival Condition Summary

| | | | |
|---|---|---|---|
| Shipping Container Sealed: | Yes | Sample IDs on COC match Containers: | Yes |
| Custody Seal Present: | Yes | Sample Date/Times match COC: | Yes |
| Custody Seal Intact: | Yes | VOA Vial Headspace ≥ 6mm: | N/A |
| Samples Chilled: | Yes | Total Trip Blank Qty: | 0 |
| Paperwork Enclosed: | Yes | Air Quality Samples Present: | No |
| Samples Intact: | Yes | | |
| Missing Samples: | No | | |
| Extra Samples: | No | | |
| Discrepancy in Container Qty on COC: | No | | |

*Unpacked by Timothy Cubberley (6520) at 12:25 on 07/11/2015*

### Samples Chilled Details: Contaminated Soil non Hazardous

*Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

| Cooler # | Thermometer ID | Corrected Temp | Therm. Type | Ice Type | Ice Present? | Ice Container | Elevated Temp? |
|---|---|---|---|---|---|---|---|
| 1 | DT131 | 1.5 | DT | Wet | Y | Bagged | N |
| 2 | DT131 | 1.4 | DT | Wet | Y | Bagged | N |
| 3 | DT131 | 1.3 | DT | Wet | Y | Bagged | N |
| 4 | DT131 | 2.5 | DT | Wet | Y | Bagged | N |



2425 New Holland Pike
Lancaster, PA 17601-2425
T 717-656-2300
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# Explanation of Symbols and Abbreviations

*The following defines common symbols and abbreviations used in reporting technical data:*

| | | | |
|---|---|---|---|
| **RL** | Reporting Limit | **BMQL** | Below Minimum Quantitation Level |
| **N.D.** | none detected | **MPN** | Most Probable Number |
| **TNTC** | Too Numerous To Count | **CP Units** | cobalt-chloroplatinate units |
| **IU** | International Units | **NTU** | nephelometric turbidity units |
| **umhos/cm** | micromhos/cm | **ng** | nanogram(s) |
| **C** | degrees Celsius | **F** | degrees Fahrenheit |
| **meq** | milliequivalents | **lb.** | pound(s) |
| **g** | gram(s) | **kg** | kilogram(s) |
| **µg** | microgram(s) | **mg** | milligram(s) |
| **mL** | milliliter(s) | **L** | liter(s) |
| **m3** | cubic meter(s) | **µL** | microliter(s) |
| | | **pg/L** | picogram/liter |

| | |
|---|---|
| **<** | less than |
| **>** | greater than |
| **ppm** | parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas. |
| **ppb** | parts per billion |
| **Dry weight basis** | Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis. |

*Laboratory Data Qualifiers:*

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

July 22, 2015

**Project: 12949/Bin Storage Area**

Submittal Date: 07/11/2015
Group Number: 1576103
PO Number: 0015063842
State of Sample Origin: CA

| Client Sample Description | Lancaster Labs (LL) # |
|---|---|
| 12949 P21024 Oily Sludge Hazardous Grab Solid | 7963389 |
| 12949 P21024 Oily Sludge Hazardous Grab Solid | 7963390 |
| 12949 P21024 Oily Sludge Hazardous Grab Solid | 7963391 |
| 12949 P21024 Oily Sludge Hazardous Grab Solid | 7963392 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

| | | |
|---|---|---|
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Douglas Hubbard |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Matt Diaz |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Rebecca Bowen |
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Respectfully Submitted,

Larry Starkey
Group Leader

(510) 232-8894

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# Analysis Report

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX
BSA/TTLC

LL Sample # SW 7963389
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12949

| CAT No. | Analysis Name | CAS Number | As Received Result | | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|---|
| **GC/MS Volatiles** | **SW-846 8260B** | | mg/kg | | mg/kg | |
| 10237 | Benzene | 71-43-2 | 0.56 | | 0.027 | 54.35 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | | 0.22 | 54.35 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | | 0.054 | 54.35 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | | 0.054 | 54.35 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | | 0.054 | 54.35 |
| 10237 | Chloroform | 67-66-3 | N.D. | | 0.054 | 54.35 |
| 10237 | 1,2-Dibromoethane | 106-93-4 | N.D. | | 0.054 | 54.35 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | | 0.054 | 54.35 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | | 0.054 | 54.35 |
| 10237 | 1,4-Dioxane | 123-91-1 | N.D. | | 3.8 | 54.35 |
| 10237 | Ethylbenzene | 100-41-4 | 0.37 | | 0.054 | 54.35 |
| 10237 | n Hexane | 110-54-3 | 0.22 | J | 0.054 | 54.35 |
| 10237 | Isopropylbenzene | 98-82-8 | 0.19 | J | 0.054 | 54.35 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | | 0.11 | 54.35 |
| 10237 | Styrene | 100-42-5 | N.D. | | 0.054 | 54.35 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | | 0.054 | 54.35 |
| 10237 | Toluene | 108-88-3 | 0.56 | | 0.054 | 54.35 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | | 0.054 | 54.35 |
| 10237 | 1,2,4-Trimethylbenzene | 95-63-6 | 5.1 | | 0.054 | 54.35 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | | 0.054 | 54.35 |
| 10237 | Xylene (Total) | 1330-20-7 | 2.3 | | 0.054 | 54.35 |
| **GC/MS Semivolatiles** | **SW-846 8270C** | | mg/kg | | mg/kg | |
| 10728 | Anthracene | 120-12-7 | 13 | J | 10 | 10 |
| 10728 | Benzenethiol | 108-98-5 | N.D. | | 1,000 | 10 |
| 10728 | Benzo(a)anthracene | 56-55-3 | 17 | J | 10 | 10 |
| 10728 | Benzo(a)pyrene | 50-32-8 | 10 | J | 10 | 10 |
| 10728 | Benzo(b)fluoranthene | 205-99-2 | 17 | J | 10 | 10 |
| 10728 | Benzo(k)fluoranthene | 207-08-9 | N.D. | | 10 | 10 |
| 10728 | 1,1'-Biphenyl | 92-52-4 | N.D. | | 50 | 10 |
| 10728 | Butylbenzylphthalate | 85-68-7 | N.D. | | 200 | 10 |
| 10728 | Di-n-butylphthalate | 84-74-2 | N.D. | | 200 | 10 |
| 10728 | Chrysene | 218-01-9 | 45 | J | 10 | 10 |
| 10728 | Dibenz(a,h)acridine | 226-36-8 | N.D. | | 100 | 10 |
| 10728 | Dibenz(a,h)anthracene | 53-70-3 | N.D. | | 10 | 10 |
| 10728 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | | 50 | 10 |
| 10728 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | | 50 | 10 |
| 10728 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | | 50 | 10 |
| 10728 | Diethylphthalate | 84-66-2 | N.D. | | 200 | 10 |
| 10728 | 7,12-Dimethylbenz[a]anthracene | 57-97-6 | N.D. | | 50 | 10 |
| 10728 | 2,4-Dimethylphenol | 105-67-9 | N.D. | | 50 | 10 |
| 10728 | Dimethylphthalate | 131-11-3 | N.D. | | 200 | 10 |
| 10728 | 2,4-Dinitrophenol | 51-28-5 | N.D. | | 900 | 10 |
| 10728 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | | 200 | 10 |
| 10728 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | | 200 | 10 |
| 10728 | Fluoranthene | 206-44-0 | N.D. | | 10 | 10 |
| 10728 | Hexachlorobenzene | 118-74-1 | N.D. | | 10 | 10 |
| 10728 | Hexachlorobutadiene | 87-68-3 | N.D. | | 50 | 10 |
| 10728 | Hexachloroethane | 67-72-1 | N.D. | | 100 | 10 |
| 10728 | Indene | 95-13-6 | N.D. | | 100 | 10 |

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# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX
BSA/TTLC

LL Sample # SW 7963389
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12949

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC/MS Semivolatiles** | **SW-846 8270C** | | **mg/kg** | **mg/kg** | |
| 10728 | 6-Methylchrysene | 1705-85-7 | N.D. | 100 | 10 |
| 10728 | 1-Methylnaphthalene | 90-12-0 | 51 J | 10 | 10 |
| 10728 | 2-Methylnaphthalene | 91-57-6 | 58 | 10 | 10 |
| 10728 | 2-Methylphenol | 95-48-7 | N.D. | 50 | 10 |
| 10728 | 4-Methylphenol | 106-44-5 | N.D. | 50 | 10 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | |
| 10728 | Naphthalene | 91-20-3 | 20 J | 10 | 10 |
| 10728 | Nitrobenzene | 98-95-3 | N.D. | 50 | 10 |
| 10728 | 4-Nitrophenol | 100-02-7 | N.D. | 500 | 10 |
| 10728 | Di n octylphthalate | 117-84-0 | N.D. | 200 | 10 |
| 10728 | Pentachlorophenol | 87-86-5 | N.D. | 100 | 10 |
| 10728 | Phenanthrene | 85-01-8 | 81 | 10 | 10 |
| 10728 | Phenol | 108-95-2 | N.D. | 50 | 10 |
| 10728 | Pyrene | 129-00-0 | 29 J | 10 | 10 |
| 10728 | Pyridine | 110-86-1 | N.D. | 200 | 10 |
| 10728 | Quinoline | 91-22-5 | N.D. | 100 | 10 |
| 10728 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 50 | 10 |
| 10728 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 50 | 10 |
| | Reporting limits were raised due to interference from the sample matrix. | | | | |
| **Metals** | | **SW-846 6010B** | **mg/kg** | **mg/kg** | |
| 06944 | Antimony | 7440-36-0 | N.D. | 0.327 | 1 |
| 06935 | Arsenic | 7440-38-2 | N.D. | 0.634 | 1 |
| 06946 | Barium | 7440-39-3 | 0.618 | 0.0327 | 1 |
| 06947 | Beryllium | 7440-41-7 | N.D. | 0.0663 | 1 |
| 06949 | Cadmium | 7440-43-9 | 0.0505 J | 0.0327 | 1 |
| 06951 | Chromium | 7440-47-3 | N.D. | 0.109 | 1 |
| 06952 | Cobalt | 7440-48-4 | 0.0970 J | 0.0950 | 1 |
| 06953 | Copper | 7440-50-8 | 0.684 J | 0.327 | 1 |
| 06955 | Lead | 7439-92-1 | 0.700 J | 0.495 | 1 |
| 06960 | Molybdenum | 7439-98-7 | N.D. | 0.168 | 1 |
| 06961 | Nickel | 7440-02-0 | 1.61 | 0.149 | 1 |
| 06936 | Selenium | 7782-49-2 | 0.687 J | 0.436 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.188 | 1 |
| 06925 | Thallium | 7440-28-0 | N.D. | 0.792 | 1 |
| 06971 | Vanadium | 7440-62-2 | 3.69 | 0.0901 | 1 |
| 06972 | Zinc | 7440-66-6 | 29.8 | 0.257 | 1 |
| | | **SW-846 7471A** | **mg/kg** | **mg/kg** | |
| 00159 | Mercury | 7439-97-6 | 0.200 | 0.0096 | 1 |
| **Wet Chemistry** | | **SW-846 9045C modified** | **Std. Units** | **Std. Units** | |
| 00394 | pH | n.a. | 5.65 | 0.0100 | 1 |
| | The pH was measured in water at 21.2 C. | | | | |

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# Analysis Report

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX
BSA/TTLC

LL Sample # SW 7963389
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12949

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **Wet Chemistry** | | SM 2540 G-1997 | % | % | |
| 00111 | Moisture | n.a. | 3.1 | 0.50 | 1 |
| | Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | | | | |

## General Sample Comments

CA ELAP Lab Certification No. 2792
The analysis for Bioassay was subcontracted to another laboratory.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 10237 | VOCs- Solid by 8260B | SW-846 8260B | 1 | R151951AA | 07/14/2015 21:04 | Anita M Dale | 54.35 |
| 00374 | GC/MS - Bulk Soil Prep | SW-846 5035A Modified | 1 | 201519238232 | 07/11/2015 18:19 | Mitchell R Washel | n.a. |
| 00374 | GC/MS - Bulk Soil Prep | SW-846 5035A Modified | 2 | 201519238232 | 07/11/2015 18:19 | Mitchell R Washel | n.a. |
| 06646 | GC/MS HL Bulk Sample Prep | SW-846 5035A Modified | 1 | 201519238232 | 07/11/2015 17:24 | Mitchell R Washel | n.a. |
| 10728 | Skinner 8270 (microwave) | SW-846 8270C | 1 | 15195SLB026 | 07/17/2015 03:55 | Catherine E Bachman | 10 |
| 10812 | BNA Soil Microwave Skinner | SW-846 3546 | 1 | 15195SLB026 | 07/14/2015 15:00 | Wanda F Oswald | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06947 | Beryllium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06960 | Molybdenum | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 151965708003 | 07/16/2015 06:38 | Joanne M Gates | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 151945711003 | 07/15/2015 09:02 | Damary Valentin | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 151945708001 | 07/14/2015 10:35 | James L Mertz | 1 |

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# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX
BSA/TTLC

LL Sample # SW 7963389
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12949

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 2 | 151965708003 | 07/15/2015 21:20 | Annamaria Kuhns | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A modified | 1 | 151945711003 | 07/14/2015 14:15 | James L Mertz | 1 |
| 00394 | pH | SW-846 9045C modified | 1 | 15197039401A | 07/16/2015 21:30 | Luz M Groff | 1 |
| 00111 | Moisture | SM 2540 G-1997 | 1 | 15195820001A | 07/14/2015 22:15 | Scott W Freisher | 1 |

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# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX TCLP NVE
BSA/TCLP NON-VOA LEACH. EXT

LL Sample # TL 7963390
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2949N

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC/MS Semivolatiles** | **SW-846 8270C** | | mg/l | mg/l | |
| 00949 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.003 | 1 |
| 00949 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 0.005 | 1 |
| 00949 | Hexachlorobenzene | 118-74-1 | N.D. | 0.0005 | 1 |
| 00949 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.003 | 1 |
| 00949 | Hexachloroethane | 67-72-1 | N.D. | 0.005 | 1 |
| 00949 | 2-Methylphenol | 95-48-7 | 0.005 | 0.003 | 1 |
| 00949 | 4-Methylphenol | 106-44-5 | 0.006 | 0.003 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | |
| 00949 | Nitrobenzene | 98-95-3 | N.D. | 0.003 | 1 |
| 00949 | Pentachlorophenol | 87-86-5 | N.D. | 0.005 | 1 |
| 00949 | Pyridine | 110-86-1 | N.D. | 0.010 | 1 |
| 00949 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 0.003 | 1 |
| 00949 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 0.003 | 1 |
| **Metals** | **SW-846 6010B** | | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0070 | 1 |
| 07046 | Barium | 7440-39-3 | N.D. | 0.0030 | 10 |
| | The barium result was performed by the Method of Standard Addition. Reporting limits were raised due to interference from the sample matrix. | | | | |
| 07049 | Cadmium | 7440-43-9 | 0.00040 J | 0.00030 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0015 | 1 |
| 07055 | Lead | 7439-92-1 | N.D. | 0.0051 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0082 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0014 | 1 |
| | **SW-846 7470A** | | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 1 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00949 | TCLP Acid Base/Neutrals | SW-846 8270C | 1 | 15198WAK026 | 07/20/2015 12:27 | Linda M Hartenstine | 1 |
| 04731 | TCLP Leachate Extraction | SW-846 3510C | 1 | 15198WAK026 | 07/18/2015 09:40 | Kelli M Barto | 1 |

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# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX TCLP NVE
BSA/TCLP NON-VOA LEACH. EXT

LL Sample # TL 7963390
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2949N

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 07035 | Arsenic | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:17 | Joanne M Gates | 1 |
| 07046 | Barium | SW-846 6010B | 2 | 151985705002 | 07/20/2015 14:13 | Eric L Eby | 10 |
| 07049 | Cadmium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:17 | Joanne M Gates | 1 |
| 07051 | Chromium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:17 | Joanne M Gates | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:17 | Joanne M Gates | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:17 | Joanne M Gates | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 151985705002 | 07/20/2015 10:17 | Joanne M Gates | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 151985713001 | 07/22/2015 09:26 | Damary Valentin | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 151985705002 | 07/19/2015 10:31 | James L Mertz | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 151985713001 | 07/21/2015 08:32 | Katlin N Cataldi | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 15197-2486-0947B | 07/16/2015 15:50 | Christina A Huber | n.a. |

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# Analysis Report

Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX TCLP ZHE
BSA/TCLP ZERO HSP. EXT.

LL Sample # TL 7963391
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2949Z

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| GC/MS Volatiles | SW-846 8260B | | mg/l | mg/l | |
| 03636 | Benzene | 71-43-2 | 0.011 J | 0.010 | 20 |
| 03636 | 2-Butanone | 78-93-3 | N.D. | 0.060 | 20 |
| 03636 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.010 | 20 |
| 03636 | Chlorobenzene | 108-90-7 | N.D. | 0.010 | 20 |
| 03636 | Chloroform | 67-66-3 | N.D. | 0.010 | 20 |
| 03636 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.010 | 20 |
| 03636 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.010 | 20 |
| 03636 | Tetrachloroethene | 127-18-4 | N.D. | 0.010 | 20 |
| 03636 | Trichloroethene | 79-01-6 | N.D. | 0.010 | 20 |
| 03636 | Vinyl Chloride | 75-01-4 | N.D. | 0.010 | 20 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03636 | TCLP VOCs by 8260B | SW-846 8260B | 1 | N151981AA | 07/17/2015 19:18 | Daniel H Heller | 20 |
| 01163 | GC/MS VOA Water Prep | SW-846 5030B | 1 | N151981AA | 07/17/2015 19:18 | Daniel H Heller | 20 |
| 02573 | CA TCLP ZHE | SW-846 1311 | 1 | 15196-2486-2573 | 07/15/2015 15:15 | Christina A Huber | 1 |

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# Analysis Report

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Sample Description: 12949 P21024 Oily Sludge Hazardous Grab Solid
Job#: 12836 Cost Ctr.: DWRRICF2185EX STLC NVE
BSA/STLC WET LEACH. EXT.

LL Sample # TL 7963392
LL Group # 1576103
Account # 10845

Project Name: 12949/Bin Storage Area

Collected: 07/10/2015 12:00 by FJ

Submitted: 07/11/2015 09:35
Reported: 07/22/2015 12:38

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

2949W

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 01435 | Non-volatile WET | CCR Title 22 WET Sec 66700 | 1 | 15194-2486-143 5 | 07/13/2015 09:43 | Christina A Huber | n.a. |

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# Quality Control Summary

Client Name: Chevron Products Company
Reported: 07/22/2015 12:38

Group Number: 1576103

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: N151981AA | Sample number(s): 7963391 | | | | | | | |
| Benzene | N.D. | 0.0005 | mg/l | 92 | 93 | 78-120 | 1 | 30 |
| 2-Butanone | N.D. | 0.003 | mg/l | 86 | 89 | 54-133 | 4 | 30 |
| Carbon Tetrachloride | N.D. | 0.0005 | mg/l | 110 | 108 | 74-130 | 2 | 30 |
| Chlorobenzene | N.D. | 0.0005 | mg/l | 102 | 101 | 80-120 | 1 | 30 |
| Chloroform | N.D. | 0.0005 | mg/l | 99 | 100 | 80-120 | 1 | 30 |
| 1,2-Dichloroethane | N.D. | 0.0005 | mg/l | 106 | 106 | 72-127 | 1 | 30 |
| 1,1-Dichloroethene | N.D. | 0.0005 | mg/l | 92 | 93 | 76-124 | 1 | 30 |
| Tetrachloroethene | N.D. | 0.0005 | mg/l | 104 | 104 | 80-120 | 0 | 30 |
| Trichloroethene | N.D. | 0.0005 | mg/l | 101 | 100 | 80-120 | 1 | 30 |
| Vinyl Chloride | N.D. | 0.0005 | mg/l | 83 | 89 | 69-120 | 6 | 30 |
| Batch number: R151951AA | Sample number(s): 7963389 | | | | | | | |
| Benzene | N.D. | 0.025 | mg/kg | 99 | 109 | 80-120 | 10 | 30 |
| 2-Butanone | N.D. | 0.20 | mg/kg | 90 | 100 | 62-123 | 11 | 30 |
| Carbon Disulfide | N.D. | 0.050 | mg/kg | 96 | 104 | 52-126 | 8 | 30 |
| Carbon Tetrachloride | N.D. | 0.050 | mg/kg | 102 | 108 | 69-130 | 6 | 30 |
| Chlorobenzene | N.D. | 0.050 | mg/kg | 105 | 113 | 80-120 | 7 | 30 |
| Chloroform | N.D. | 0.050 | mg/kg | 101 | 112 | 80-120 | 11 | 30 |
| 1,2-Dibromoethane | N.D. | 0.050 | mg/kg | 102 | 111 | 80-120 | 9 | 30 |
| 1,2-Dichloroethane | N.D. | 0.050 | mg/kg | 102 | 113 | 77-130 | 10 | 30 |
| 1,1-Dichloroethene | N.D. | 0.050 | mg/kg | 95 | 100 | 73-129 | 6 | 30 |
| 1,4-Dioxane | N.D. | 3.5 | mg/kg | 121 | 135* | 58-124 | 11 | 30 |
| Ethylbenzene | N.D. | 0.050 | mg/kg | 105 | 116 | 80-120 | 10 | 30 |
| n-Hexane | N.D. | 0.050 | mg/kg | 114 | 103 | 44-120 | 10 | 30 |
| Isopropylbenzene | N.D. | 0.050 | mg/kg | 101 | 108 | 76-120 | 6 | 30 |
| Methylene Chloride | N.D. | 0.10 | mg/kg | 97 | 104 | 80-124 | 8 | 30 |
| Styrene | N.D. | 0.050 | mg/kg | 95 | 104 | 76-120 | 8 | 30 |
| Tetrachloroethene | N.D. | 0.050 | mg/kg | 99 | 107 | 78-120 | 8 | 30 |
| Toluene | N.D. | 0.050 | mg/kg | 105 | 113 | 80-120 | 7 | 30 |
| Trichloroethene | N.D. | 0.050 | mg/kg | 97 | 108 | 80-120 | 10 | 30 |
| 1,2,4-Trimethylbenzene | N.D. | 0.050 | mg/kg | 105 | 114 | 79-120 | 7 | 30 |
| Vinyl Chloride | N.D. | 0.050 | mg/kg | 86 | 93 | 59-120 | 8 | 30 |
| Xylene (Total) | N.D. | 0.050 | mg/kg | 103 | 111 | 80-120 | 8 | 30 |
| Batch number: 15195SLB026 | Sample number(s): 7963389 | | | | | | | |
| Anthracene | N.D. | 1.0 | mg/kg | 102 | 103 | 82-118 | 1 | 30 |
| Benzenethiol | N.D. | 100. | mg/kg | | | | | |
| Benzo(a)anthracene | N.D. | 1.0 | mg/kg | 98 | 100 | 76-119 | 2 | 30 |
| Benzo(a)pyrene | N.D. | 1.0 | mg/kg | 91 | 95 | 85-117 | 4 | 30 |
| Benzo(b)fluoranthene | N.D. | 1.0 | mg/kg | 87 | 93 | 78-129 | 7 | 30 |
| Benzo(k)fluoranthene | N.D. | 1.0 | mg/kg | 103 | 106 | 79-120 | 2 | 30 |
| 1,1'-Biphenyl | N.D. | 5.0 | mg/kg | 99 | 107 | 78-111 | 9 | 30 |
| Butylbenzylphthalate | N.D. | 20. | mg/kg | 94 | 95 | 80-118 | 1 | 30 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576103
Reported: 07/22/2015 12:38

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Di-n-butylphthalate | N.D. | 20. | mg/kg | 94 | 95 | 84-120 | 1 | 30 |
| Chrysene | N.D. | 1.0 | mg/kg | 102 | 103 | 80-121 | 1 | 30 |
| Dibenz(a,h)acridine | N.D. | 10. | mg/kg | 102 | 108 | 73-137 | 6 | 30 |
| Dibenz(a,h)anthracene | N.D. | 1.0 | mg/kg | 97 | 100 | 81-123 | 4 | 30 |
| 1,2-Dichlorobenzene | N.D. | 5.0 | mg/kg | 100 | 98 | 79-112 | 3 | 30 |
| 1,3-Dichlorobenzene | N.D. | 5.0 | mg/kg | 100 | 104 | 79-113 | 4 | 30 |
| 1,4-Dichlorobenzene | N.D. | 5.0 | mg/kg | 98 | 104 | 79-112 | 6 | 30 |
| Diethylphthalate | N.D. | 20. | mg/kg | 98 | 102 | 81-118 | 3 | 30 |
| 7,12-Dimethylbenz[a]anthracene | N.D. | 5.0 | mg/kg | 94 | 99 | 85-116 | 5 | 30 |
| 2,4-Dimethylphenol | N.D. | 5.0 | mg/kg | 92 | 102 | 83-120 | 11 | 30 |
| Dimethylphthalate | N.D. | 20. | mg/kg | 96 | 105 | 82-113 | 9 | 30 |
| 2,4-Dinitrophenol | N.D. | 90. | mg/kg | 78 | 85 | 47-130 | 9 | 30 |
| 2,4-Dinitrotoluene | N.D. | 20. | mg/kg | 96 | 101 | 81-122 | 5 | 30 |
| bis(2-Ethylhexyl)phthalate | N.D. | 20. | mg/kg | 91 | 90 | 81-121 | 1 | 30 |
| Fluoranthene | N.D. | 1.0 | mg/kg | 97 | 98 | 81-117 | 0 | 30 |
| Hexachlorobenzene | N.D. | 1.0 | mg/kg | 99 | 104 | 75-123 | 5 | 30 |
| Hexachlorobutadiene | N.D. | 5.0 | mg/kg | 103 | 111 | 78-121 | 8 | 30 |
| Hexachloroethane | N.D. | 10. | mg/kg | 97 | 103 | 78-114 | 6 | 30 |
| Indene | N.D. | 10. | mg/kg | 99 | 101 | 83-116 | 2 | 30 |
| 6-Methylchrysene | N.D. | 10. | mg/kg | 98 | 100 | 77-108 | 2 | 30 |
| 1-Methylnaphthalene | N.D. | 1.0 | mg/kg | 99 | 101 | 77-115 | 2 | 30 |
| 2-Methylnaphthalene | N.D. | 1.0 | mg/kg | 95 | 99 | 83-109 | 5 | 30 |
| 2-Methylphenol | N.D. | 5.0 | mg/kg | 104 | 107 | 82-125 | 4 | 30 |
| 4-Methylphenol | N.D. | 5.0 | mg/kg | 91 | 95 | 75-119 | 4 | 30 |
| Naphthalene | N.D. | 1.0 | mg/kg | 97 | 103 | 83-112 | 6 | 30 |
| Nitrobenzene | N.D. | 5.0 | mg/kg | 100 | 108 | 80-115 | 8 | 30 |
| 4-Nitrophenol | N.D. | 50. | mg/kg | 87 | 88 | 60-129 | 1 | 30 |
| Di-n-octylphthalate | N.D. | 20. | mg/kg | 86 | 91 | 82-134 | 6 | 30 |
| Pentachlorophenol | N.D. | 10. | mg/kg | 95 | 92 | 57-126 | 3 | 30 |
| Phenanthrene | N.D. | 1.0 | mg/kg | 98 | 101 | 80-114 | 2 | 30 |
| Phenol | N.D. | 5.0 | mg/kg | 105 | 105 | 75-117 | 0 | 30 |
| Pyrene | N.D. | 1.0 | mg/kg | 98 | 101 | 81-114 | 3 | 30 |
| Pyridine | N.D. | 20. | mg/kg | 93 | 92 | 55-118 | 2 | 30 |
| Quinoline | N.D. | 10. | mg/kg | 101 | 105 | 84-111 | 5 | 30 |
| 2,4,5-Trichlorophenol | N.D. | 5.0 | mg/kg | 92 | 101 | 86-123 | 9 | 30 |
| 2,4,6-Trichlorophenol | N.D. | 5.0 | mg/kg | 99 | 108 | 81-123 | 9 | 30 |

| | | | | | |
|---|---|---|---|---|---|
| Batch number: 15198WAK026 | Sample number(s): 7963390 | | | | |
| 1,4-Dichlorobenzene | N.D. | 0.003 | mg/l | 85 | 56-106 |
| 2,4-Dinitrotoluene | N.D. | 0.005 | mg/l | 94 | 77-124 |
| Hexachlorobenzene | N.D. | 0.0005 | mg/l | 108 | 73-118 |
| Hexachlorobutadiene | N.D. | 0.003 | mg/l | 87 | 42-110 |
| Hexachloroethane | N.D. | 0.005 | mg/l | 80 | 43-108 |
| 2-Methylphenol | N.D. | 0.003 | mg/l | 85 | 66-112 |
| 4-Methylphenol | N.D. | 0.003 | mg/l | 79 | 56-109 |
| Nitrobenzene | N.D. | 0.003 | mg/l | 87 | 77-119 |
| Pentachlorophenol | N.D. | 0.005 | mg/l | 108 | 50-121 |
| Pyridine | N.D. | 0.010 | mg/l | 58 | 22-96 |
| 2,4,5-Trichlorophenol | N.D. | 0.003 | mg/l | 92 | 76-116 |
| 2,4,6-Trichlorophenol | N.D. | 0.003 | mg/l | 100 | 75-117 |
| Batch number: 151945711003 | Sample number(s): 7963389 | | | | |
| Mercury | N.D. | 0.0100 | mg/kg | 100 | 80-120 |
| Batch number: 151965708003 | Sample number(s): 7963389 | | | | |
| Antimony | N.D. | 0.330 | mg/kg | 102 | 80-120 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576103
Reported: 07/22/2015 12:38

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Arsenic | N.D. | 0.640 | mg/kg | 99 | | 80-120 | | |
| Barium | N.D. | 0.0330 | mg/kg | 103 | | 80-120 | | |
| Beryllium | N.D. | 0.0670 | mg/kg | 110 | | 80-120 | | |
| Cadmium | N.D. | 0.0330 | mg/kg | 99 | | 80-120 | | |
| Chromium | N.D. | 0.110 | mg/kg | 101 | | 80-120 | | |
| Cobalt | N.D. | 0.0960 | mg/kg | 98 | | 80-120 | | |
| Copper | N.D. | 0.330 | mg/kg | 102 | | 80-120 | | |
| Lead | N.D. | 0.500 | mg/kg | 100 | | 80-120 | | |
| Molybdenum | N.D. | 0.170 | mg/kg | 99 | | 80-120 | | |
| Nickel | N.D. | 0.150 | mg/kg | 103 | | 80-120 | | |
| Selenium | N.D. | 0.440 | mg/kg | 98 | | 80-120 | | |
| Silver | N.D. | 0.190 | mg/kg | 95 | | 80-120 | | |
| Thallium | N.D. | 0.800 | mg/kg | 102 | | 80-120 | | |
| Vanadium | N.D. | 0.0910 | mg/kg | 106 | | 80-120 | | |
| Zinc | N.D. | 0.260 | mg/kg | 98 | | 80-120 | | |
| Batch number: 151985705002 | Sample number(s): 7963390 | | | | | | | |
| Arsenic | N.D. | 0.0070 | mg/l | 114 | | 80-120 | | |
| Barium | 0.00066 J | 0.00030 | mg/l | 95 | | 80-120 | | |
| Cadmium | 0.00041 J | 0.00030 | mg/l | 100 | | 80-120 | | |
| Chromium | 0.0016 J | 0.0015 | mg/l | 101 | | 80-120 | | |
| Lead | N.D. | 0.0051 | mg/l | 96 | | 80-120 | | |
| Selenium | N.D. | 0.0082 | mg/l | 114 | | 80-120 | | |
| Silver | N.D. | 0.0014 | mg/l | 102 | | 80-120 | | |
| Batch number: 151985713001 | Sample number(s): 7963390 | | | | | | | |
| Mercury | N.D. | 0.00005 0 | mg/l | 100 | | 80-120 | | |
| Batch number: 15197039401A | Sample number(s): 7963389 | | | | | | | |
| pH | | | | 100 | | 95-105 | | |
| Batch number: 15195820001A | Sample number(s): 7963389 | | | | | | | |
| Moisture | | | | 100 | | 99-101 | | |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: N151981AA | Sample number(s): 7963391 UNSPK: P958613 | | | | | | | | |
| Benzene | 101 | 102 | 72-134 | 1 | 30 | | | | |
| 2-Butanone | 94 | 94 | 44-135 | 0 | 30 | | | | |
| Carbon Tetrachloride | 111 | 109 | 75-148 | 2 | 30 | | | | |
| Chlorobenzene | 107 | 107 | 87-124 | 0 | 30 | | | | |
| Chloroform | 101 | 101 | 81-134 | 0 | 30 | | | | |
| 1,2-Dichloroethane | 101 | 99 | 63-142 | 1 | 30 | | | | |
| 1,1-Dichloroethene | 102 | 103 | 79-137 | 1 | 30 | | | | |
| Tetrachloroethene | 112 | 113 | 80-128 | 1 | 30 | | | | |
| Trichloroethene | 110 | 107 | 88-133 | 3 | 30 | | | | |
| Vinyl Chloride | 100 | 95 | 66-133 | 5 | 30 | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company
Reported: 07/22/2015 12:38

Group Number: 1576103

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: R151951AA | Sample number(s): 7963389 UNSPK: P956420 | | | | | | | | |
| Benzene | 113 | 100 | 55-143 | 15 | 30 | | | | |
| 2-Butanone | 106 | 94 | 37-163 | 14 | 30 | | | | |
| Carbon Disulfide | 105 | 97 | 48-146 | 10 | 30 | | | | |
| Carbon Tetrachloride | 112 | 100 | 51-165 | 13 | 30 | | | | |
| Chlorobenzene | 119 | 104 | 49-135 | 15 | 30 | | | | |
| Chloroform | 114 | 103 | 61-142 | 12 | 30 | | | | |
| 1,2-Dibromoethane | 117 | 103 | 54-129 | 15 | 30 | | | | |
| 1,2-Dichloroethane | 118 | 103 | 54-143 | 15 | 30 | | | | |
| 1,1-Dichloroethene | 106 | 96 | 61-149 | 12 | 30 | | | | |
| 1,4-Dioxane | 127 | 114 | 39-180 | 13 | 30 | | | | |
| Ethylbenzene | 123 | 118 | 44-141 | 7 | 30 | | | | |
| n-Hexane | 89 | 98 | 33-169 | 8 | 30 | | | | |
| Isopropylbenzene | 118 | 103 | 38-144 | 15 | 30 | | | | |
| Methylene Chloride | 111 | 101 | 60-149 | 12 | 30 | | | | |
| Styrene | 112 | 98 | 35-134 | 15 | 30 | | | | |
| Tetrachloroethene | 111 | 96 | 42-149 | 16 | 30 | | | | |
| Toluene | 124 | 142 | 50-146 | 12 | 30 | | | | |
| Trichloroethene | 123 | 87 | 53-144 | 15 | 30 | | | | |
| 1,2,4-Trimethylbenzene | 124 | 110 | 37-149 | 15 | 30 | | | | |
| Vinyl Chloride | 88 | 82 | 50-154 | 9 | 30 | | | | |
| Xylene (Total) | 118 | 120 | 44-136 | 1 | 30 | | | | |
| Batch number: 15198WAK026 | Sample number(s): 7963390 UNSPK: P966095 | | | | | | | | |
| 1,4-Dichlorobenzene | 82 | 81 | 51-108 | 2 | 30 | | | | |
| 2,4-Dinitrotoluene | 90 | 91 | 51-145 | 1 | 30 | | | | |
| Hexachlorobenzene | 101 | 105 | 71-119 | 3 | 30 | | | | |
| Hexachlorobutadiene | 88 | 87 | 44-113 | 1 | 30 | | | | |
| Hexachloroethane | 78 | 77 | 32-120 | 2 | 30 | | | | |
| 2-Methylphenol | 83 | 85 | 27-132 | 2 | 30 | | | | |
| 4-Methylphenol | 79 | 81 | 13-128 | 2 | 30 | | | | |
| Nitrobenzene | 83 | 84 | 50-143 | 2 | 30 | | | | |
| Pentachlorophenol | 30 | 54 | 23-140 | 54* | 30 | | | | |
| Pyridine | 56 | 49 | 20-91 | 14 | 30 | | | | |
| 2,4,5-Trichlorophenol | 77 | 84 | 34-143 | 9 | 30 | | | | |
| 2,4,6-Trichlorophenol | 79 | 89 | 19-162 | 13 | 30 | | | | |
| Batch number: 151945711003 | Sample number(s): 7963389 UNSPK: P963417 BKG: P963417 | | | | | | | | |
| Mercury | 123* | 108 | 80-120 | 8 | 20 | 0.0830 J | 0.0901 J | 8 (1) | 20 |
| Batch number: 151965708003 | Sample number(s): 7963389 UNSPK: P962360 BKG: P962360 | | | | | | | | |
| Antimony | 92 | 92 | 75-125 | 1 | 20 | 0.962 J | 0.978 J | 2 (1) | 20 |
| Arsenic | 98 | 98 | 75-125 | 0 | 20 | 1.93 J | 2.25 | 15 (1) | 20 |
| Barium | 106 | 108 | 75-125 | 2 | 20 | 28.9 | 30.8 | 7 | 20 |
| Beryllium | 110 | 111 | 75-125 | 0 | 20 | 0.392 J | 0.360 J | 9 (1) | 20 |
| Cadmium | 94 | 93 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Chromium | 111 | 110 | 75-125 | 0 | 20 | 5.20 | 5.22 | 0 (1) | 20 |
| Cobalt | 96 | 96 | 75-125 | 0 | 20 | 4.52 | 4.90 | 8 | 20 |
| Copper | 102 | 105 | 75-125 | 2 | 20 | 3.64 | 3.61 | 1 (1) | 20 |
| Lead | 102 | 100 | 75-125 | 1 | 20 | 5.40 | 5.28 | 2 (1) | 20 |
| Molybdenum | 96 | 95 | 75-125 | 1 | 20 | 0.307 J | 0.207 J | 39* (1) | 20 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1576103
Reported: 07/22/2015 12:38

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Nickel | 102 | 102 | 75-125 | 0 | 20 | 5.88 | 6.79 | 14 | 20 |
| Selenium | 95 | 93 | 75-125 | 2 | 20 | 2.27 | 2.02 | 12 (1) | 20 |
| Silver | 98 | 97 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Thallium | 98 | 98 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Vanadium | 110 | 111 | 75-125 | 1 | 20 | 8.47 | 7.83 | 8 | 20 |
| Zinc | 101 | 100 | 75-125 | 1 | 20 | 17.1 | 16.5 | 3 | 20 |
| Batch number: 151985705002 | Sample number(s): 7963390 UNSPK: P966095 BKG: P966095 | | | | | | | | |
| Arsenic | 106 | 106 | 75-125 | 0 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Barium | 4* | 4* | 75-125 | 6 | 20 | 0.0776 | 0.0795 | 3 | 20 |
| Cadmium | 86 | 86 | 75-125 | 0 | 20 | 0.0063 | 0.0063 | 1 (1) | 20 |
| Chromium | 86 | 86 | 75-125 | 0 | 20 | 0.0142 J | 0.0153 | 7 (1) | 20 |
| Lead | 64* | 63* | 75-125 | 1 | 20 | 0.0063 J | 0.0089 J | 34* (1) | 20 |
| Selenium | 112 | 112 | 75-125 | 0 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Silver | 99 | 101 | 75-125 | 2 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 151985713001 | Sample number(s): 7963390 UNSPK: P966095 BKG: P966095 | | | | | | | | |
| Mercury | 87 | 86 | 80-120 | 1 | 20 | 0.00016 J | 0.00017 J | 7 (1) | 20 |
| Batch number: 15197039401A | Sample number(s): 7963389 BKG: P966306 | | | | | | | | |
| pH | | | | | | 8.62 | 8.60 | 0 | 3 |
| Batch number: 15195820001A | Sample number(s): 7963389 BKG: P956383 | | | | | | | | |
| Moisture | | | | | | 24.0 | 23.4 | 2 | 5 |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TCLP VOCs by 8260B
Batch number: N151981AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---|---|---|---|---|
| 7963391 | 108 | 103 | 99 | 93 |
| Blank | 116 | 110 | 99 | 93 |
| LCS | 108 | 103 | 102 | 102 |
| LCSD | 108 | 105 | 102 | 101 |
| MS | 104 | 103 | 103 | 100 |
| MSD | 104 | 101 | 103 | 101 |
| Limits: | 80-116 | 77-113 | 80-113 | 78-113 |

Analysis Name: VOCs- Solid by 8260B
Batch number: R151951AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---|---|---|---|---|
| 7963389 | 82 | 83 | 87 | 90 |
| Blank | 82 | 85 | 93 | 89 |
| LCS | 83 | 85 | 92 | 90 |
| LCSD | 89 | 90 | 97 | 94 |
| MS | 62 | 66 | 71 | 72 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

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# Quality Control Summary

Client Name: Chevron Products Company
Reported: 07/22/2015 12:38

Group Number: 1576103

## Surrogate Quality Control

| | | | | |
|---|---|---|---|---|
| MSD | 67 | 68 | 75 | 77 |
| Limits: | 50-141 | 54-135 | 52-141 | 50-131 |

Analysis Name: Skinner 8270 (microwave)
Batch number: 15195SLB026

| | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|---|---|---|
| 7963389 | 104 | 107 | 97 | 104 | 109 | 107 |
| Blank | 99 | 101 | 105 | 99 | 103 | 102 |
| LCS | 104 | 104 | 106 | 99 | 100 | 101 |
| LCSD | 105 | 107 | 108 | 102 | 104 | 101 |
| Limits: | 58-122 | 57-128 | 36-142 | 54-123 | 63-124 | 61-142 |

Analysis Name: TCLP Acid Base/Neutrals
Batch number: 15198WAK026

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol |
|---|---|---|---|---|---|---|
| 7963390 | 76 | 84 | 92 | 29 | 51 | 86 |
| Blank | 81 | 86 | 93 | 33 | 56 | 92 |
| LCS | 79 | 87 | 94 | 34 | 56 | 87 |
| MS | 77 | 84 | 86 | 36 | 56 | 70 |
| MSD | 78 | 83 | 90 | 38 | 59 | 77 |
| Limits: | 60-123 | 61-112 | 35-144 | 10-82 | 10-107 | 23-145 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Chevron Richmond Refinery HES/HW Workgroup - Analytical Request / Chain of Custody

eurofins | Lancaster Laboratories

COC# 071615-03

For Lancaster Laboratories use only
Acct. # 10845 Grp. # 1576103 Sample #: 7963389-92

ject Name: Oily Sludge - Hazardous
urce (Vessel & Plant Name) Fluid channel FR ISOMAX recovery
U: HW Job # 128836
cation of Material: Bin Storage Area
mpany Code: 0061 Richmond Refinery
S Element or Cost Center: DWRRICF2185EX
mple Requestor: Thelma Aquino
mpler(s) Name: Fred Jacobs / Clinton Hendricks
te of Origin: CA

Preservative Codes: 0 = None, S = H2SO4, N = HNO3, B = NaOH, H = HCl, O = Other

Listed Waste: YES / NO

| mple Identification | Tank or Drum # | Date Collected | Time Collected | Grab | Composite | Matrix: Soil | Matrix: Water | Matrix: Oil | Matrix: Other Liquid | Total Number of Containers | EPA 8260 BTEX | CCR Metals STLC | CCR Metals Rush STLC | TCLP Metals | TCLP Benzene | Ignitability (solids) | Flashpoint | Reactivity | 25D | TPH - GRO/DRO | SKINNER LIST VOL 8260 | SKINNER LIST SVOL 8270 | pH | % MOISTURE | Bioassay Screen: Alpha | Bioassay Screen: McCampbell | Dioxin: TCDD 2,3,7,8 | Dioxin: Full List | TVP | Sulfide | Asbestos | Other Subcontract | Other Remarks: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12949 | P21024 | 7.10.15 | 12pm | X | | X | | | | 4 | X | X | X | X | X | X | X | X | | | X | X | X | | | X | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

*Shipped by Chevron ☐ *Shipped by LLI ☐ as # _____ of Dangerous Goods Shipments

| quished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [signature] | 7.10.15 | 1:35pm | [signature] | 10 JUL 15 | 1400 |
| quished by: [signature] | 10 JUL 15 | 1630 | Received by: Airborne FedEx | | |
| quished by Commercial Carrier: Airborne FedEx | | | Received by: [signature] | 7.11.15 | 935 |

Desired Completion Date: _____ or

Turn Around Time (TAT) (Circle one)
NOTE: Rush Surcharges apply for all requests less than 10 working days
1 day
3 day
5 day
TAT Clock starts when received at LLI 10 day

erature Upon Receipt N/A °C Custody Seals Intact? Yes No N/A



ED_001593_00025843

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# Sample Administration Receipt Documentation Log

Doc Log ID: 86019

Group Number(s): 1576103

Client: CA OFFICE

## Oily Sludge-Hazardous

### Delivery and Receipt Information

| | | | |
|---|---|---|---|
| Delivery Method: | BASC | Arrival Timestamp: | 07/11/2015 9:35 |
| Number of Packages: | 1 | Number of Projects: | 7 |
| State/Province of Origin: | CA | | |

### Arrival Condition Summary

| | | | |
|---|---|---|---|
| Shipping Container Sealed: | Yes | Sample IDs on COC match Containers: | Yes |
| Custody Seal Present: | No | Sample Date/Times match COC: | Yes |
| Samples Chilled: | No | VOA Vial Headspace ≥ 6mm: | N/A |
| Paperwork Enclosed: | Yes | Total Trip Blank Qty: | 0 |
| Samples Intact: | Yes | Air Quality Samples Present: | No |
| Missing Samples: | No | | |
| Extra Samples: | No | | |
| Discrepancy in Container Qty on COC: | No | | |

*Unpacked by Timothy Cubberley (6520) at 12:25 on 07/11/2015*

General Comments: One of the large jars had some sludge around the rim but the jar wasn't cracked and the lid was on tight.



2425 New Holland Pike
Lancaster, PA 17605-2425

T | 717-656-2300
F | 717-656-2681
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# Explanation of Symbols and Abbreviations

*The following defines common symbols and abbreviations used in reporting technical data:*

| | | | |
|---|---|---|---|
| **RL** | Reporting Limit | **BMQL** | Below Minimum Quantitation Level |
| **N.D.** | none detected | **MPN** | Most Probable Number |
| **TNTC** | Too Numerous To Count | **CP Units** | cobalt-chloroplatinate units |
| **IU** | International Units | **NTU** | nephelometric turbidity units |
| **umhos/cm** | micromhos/cm | **ng** | nanogram(s) |
| **C** | degrees Celsius | **F** | degrees Fahrenheit |
| **meq** | milliequivalents | **lb.** | pound(s) |
| **g** | gram(s) | **kg** | kilogram(s) |
| **µg** | microgram(s) | **mg** | milligram(s) |
| **mL** | milliliter(s) | **L** | liter(s) |
| **m3** | cubic meter(s) | **µL** | microliter(s) |
| | | **pg/L** | picogram/liter |

**<** less than

**>** greater than

**ppm** parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

**ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

*Laboratory Data Qualifiers:*

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

July 27, 2015

**Project: 12959/Bin Storage Area**

Submittal Date: 07/16/2015
Group Number: 1577316
PO Number: 0015063842
State of Sample Origin: CA

| Client Sample Description | Lancaster Labs (LL) # |
|---|---|
| 12959 P20558 Contaminated Soil non RCRA Composite | 7968726 |
| 12959 P20558 Contaminated Soil non RCRA Composite | 7968727 |
| 12959 P20558 Contaminated Soil non RCRA Composite | 7968728 |
| 12959 P20558 Contaminated Soil non RCRA Composite | 7968729 |

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our scopes of accreditation can be viewed at http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/ .

| | | |
|---|---|---|
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Douglas Hubbard |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Matt Diaz |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Rebecca Bowen |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Thelma Aquino |
| ELECTRONIC COPY TO | Chevron Products Company | Attn: Charmaine Ferraz |



ED_001593_00025843

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Respectfully Submitted,

Larry Starkey
Group Leader

(510) 232-8894

eurofins
Lancaster Laboratories Environmental
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# Analysis Report

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
Bin Storage Area/TTLC

LL Sample # SW 7968726
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12959

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| GC/MS Volatiles | SW-846 8260B | | mg/kg | mg/kg | |
| 10237 | Benzene | 71-43-2 | N.D. | 0.0006 | 1.1 |
| 10237 | 2-Butanone | 78-93-3 | N.D. | 0.004 | 1.1 |
| 10237 | Carbon Disulfide | 75-15-0 | N.D. | 0.001 | 1.1 |
| 10237 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.001 | 1.1 |
| 10237 | Chlorobenzene | 108-90-7 | N.D. | 0.001 | 1.1 |
| 10237 | Chloroform | 67-66-3 | N.D. | 0.001 | 1.1 |
| 10237 | 1,2-Dibromoethane | 106-93-4 | N.D. | 0.001 | 1.1 |
| 10237 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.001 | 1.1 |
| 10237 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.001 | 1.1 |
| 10237 | 1,4-Dioxane | 123-91-1 | N.D. | 0.077 | 1.1 |
| 10237 | Ethylbenzene | 100-41-4 | 0.002 J | 0.001 | 1.1 |
| 10237 | n-Hexane | 110-54-3 | 0.009 | 0.001 | 1.1 |
| 10237 | Isopropylbenzene | 98-82-8 | N.D. | 0.001 | 1.1 |
| 10237 | Methylene Chloride | 75-09-2 | N.D. | 0.002 | 1.1 |
| 10237 | Styrene | 100-42-5 | N.D. | 0.001 | 1.1 |
| 10237 | Tetrachloroethene | 127-18-4 | N.D. | 0.001 | 1.1 |
| 10237 | Toluene | 108-88-3 | 0.002 J | 0.001 | 1.1 |
| 10237 | Trichloroethene | 79-01-6 | N.D. | 0.001 | 1.1 |
| 10237 | 1,2,4-Trimethylbenzene | 95-63-6 | 0.016 | 0.001 | 1.1 |
| 10237 | Vinyl Chloride | 75-01-4 | N.D. | 0.001 | 1.1 |
| 10237 | Xylene (Total) | 1330-20-7 | 0.015 | 0.001 | 1.1 |
| GC/MS Semivolatiles | SW-846 8270C | | mg/kg | mg/kg | |
| 10728 | Anthracene | 120-12-7 | 0.075 J | 0.033 | 10 |
| 10728 | Benzenethiol | 108-98-5 | N.D. | 3.3 | 10 |
| 10728 | Benzo(a)anthracene | 56-55-3 | 0.12 J | 0.033 | 10 |
| 10728 | Benzo(a)pyrene | 50-32-8 | 0.097 J | 0.033 | 10 |
| 10728 | Benzo(b)fluoranthene | 205-99-2 | 0.076 J | 0.033 | 10 |
| 10728 | Benzo(k)fluoranthene | 207-08-9 | 0.044 J | 0.033 | 10 |
| 10728 | 1,1'-Biphenyl | 92-52-4 | N.D. | 0.17 | 10 |
| 10728 | Butylbenzylphthalate | 85-68-7 | N.D. | 0.66 | 10 |
| 10728 | Di-n-butylphthalate | 84-74-2 | N.D. | 0.66 | 10 |
| 10728 | Chrysene | 218-01-9 | 0.23 | 0.033 | 10 |
| 10728 | Dibenz(a,h)acridine | 226-36-8 | N.D. | 0.33 | 10 |
| 10728 | Dibenz(a,h)anthracene | 53-70-3 | 0.059 J | 0.033 | 10 |
| 10728 | 1,2-Dichlorobenzene | 95-50-1 | N.D. | 0.17 | 10 |
| 10728 | 1,3-Dichlorobenzene | 541-73-1 | N.D. | 0.17 | 10 |
| 10728 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.17 | 10 |
| 10728 | Diethylphthalate | 84-66-2 | N.D. | 0.66 | 10 |
| 10728 | 7,12-Dimethylbenz[a]anthracene | 57-97-6 | N.D. | 0.17 | 10 |
| 10728 | 2,4-Dimethylphenol | 105-67-9 | N.D. | 0.17 | 10 |
| 10728 | Dimethylphthalate | 131-11-3 | N.D. | 0.66 | 10 |
| 10728 | 2,4-Dinitrophenol | 51-28-5 | N.D. | 3.0 | 10 |
| 10728 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 0.66 | 10 |
| 10728 | bis(2-Ethylhexyl)phthalate | 117-81-7 | N.D. | 0.66 | 10 |
| 10728 | Fluoranthene | 206-44-0 | 0.087 J | 0.033 | 10 |
| 10728 | Hexachlorobenzene | 118-74-1 | N.D. | 0.033 | 10 |
| 10728 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.17 | 10 |
| 10728 | Hexachloroethane | 67-72-1 | N.D. | 0.33 | 10 |
| 10728 | Indene | 95-13-6 | N.D. | 0.33 | 10 |

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
Bin Storage Area/TTLC

LL Sample # SW 7968726
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12959

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC/MS Semivolatiles** | **SW-846 8270C** | | **mg/kg** | **mg/kg** | |
| 10728 | 6-Methylchrysene | 1705-85-7 | N.D. | 0.33 | 10 |
| 10728 | 1-Methylnaphthalene | 90-12-0 | 0.040 J | 0.033 | 10 |
| 10728 | 2-Methylnaphthalene | 91-57-6 | 0.053 J | 0.033 | 10 |
| 10728 | 2-Methylphenol | 95-48-7 | N.D. | 0.17 | 10 |
| 10728 | 4-Methylphenol | 106-44-5 | N.D. | 0.17 | 10 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | |
| 10728 | Naphthalene | 91-20-3 | 0.037 J | 0.033 | 10 |
| 10728 | Nitrobenzene | 98-95-3 | N.D. | 0.17 | 10 |
| 10728 | 4-Nitrophenol | 100-02-7 | N.D. | 1.7 | 10 |
| 10728 | Di-n-octylphthalate | 117-84-0 | N.D. | 0.66 | 10 |
| 10728 | Pentachlorophenol | 87-86-5 | N.D. | 0.33 | 10 |
| 10728 | Phenanthrene | 85-01-8 | 0.21 | 0.033 | 10 |
| 10728 | Phenol | 108-95-2 | N.D. | 0.17 | 10 |
| 10728 | Pyrene | 129-00-0 | 0.18 | 0.033 | 10 |
| 10728 | Pyridine | 110-86-1 | N.D. | 0.66 | 10 |
| 10728 | Quinoline | 91-22-5 | N.D. | 0.33 | 10 |
| 10728 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 0.17 | 10 |
| 10728 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 0.17 | 10 |
| **GC Volatiles** | **SW-846 8015B** | | **mg/kg** | **mg/kg** | |
| 01637 | TPH-GRO soil C6-C10 | n.a. | 12 | 0.2 | 25.93 |
| **GC Petroleum Hydrocarbons** | **SW-846 8015B** | | **mg/kg** | **mg/kg** | |
| 10941 | TPH-DRO soil C10-C28 microwave | n.a. | 530 | 100 | 25 |
| **Metals** | **SW-846 6010B** | | **mg/kg** | **mg/kg** | |
| 06944 | Antimony | 7440-36-0 | 3.36 | 0.398 | 1 |
| 06935 | Arsenic | 7440-38-2 | 8.00 | 0.621 | 1 |
| 06946 | Barium | 7440-39-3 | 160 | 0.0320 | 1 |
| 06947 | Beryllium | 7440-41-7 | 0.906 | 0.0650 | 1 |
| 06949 | Cadmium | 7440-43-9 | N.D. | 0.0320 | 1 |
| 06951 | Chromium | 7440-47-3 | 28.3 | 0.107 | 1 |
| 06952 | Cobalt | 7440-48-4 | 15.5 | 0.0932 | 1 |
| 06953 | Copper | 7440-50-8 | 38.2 | 0.320 | 1 |
| 06955 | Lead | 7439-92-1 | 19.6 | 0.485 | 1 |
| 06960 | Molybdenum | 7439-98-7 | 0.750 J | 0.165 | 1 |
| 06961 | Nickel | 7440-02-0 | 38.0 | 0.146 | 1 |
| 06936 | Selenium | 7782-49-2 | 1.85 J | 0.427 | 1 |
| 06966 | Silver | 7440-22-4 | N.D. | 0.184 | 1 |
| 06925 | Thallium | 7440-28-0 | 1.78 J | 0.777 | 1 |
| 06971 | Vanadium | 7440-62-2 | 38.6 | 0.0883 | 1 |
| 06972 | Zinc | 7440-66-6 | 80.1 | 0.252 | 1 |
| | **SW-846 7471A** | | **mg/kg** | **mg/kg** | |
| 00159 | Mercury | 7439-97-6 | 0.122 | 0.0095 | 1 |

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# Analysis Report

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
Bin Storage Area/TTLC

LL Sample # SW 7968726
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12959

| CAT No. | Analysis Name | CAS Number | As Received Result | As Received Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **Wet Chemistry** | **SW-846 9045C modified** | | Std. Units | Std. Units | |
| 00394 | pH<br>The pH was measured in water at 20.2 C. | n.a. | 8.13 | 0.0100 | 1 |
| **Wet Chemistry** | **SM 2540 G-1997** | | % | % | |
| 00111 | Moisture<br>Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis. | n.a. | 12.0 | 0.50 | 1 |

## General Sample Comments

CA ELAP Lab Certification No. 2792
The analysis for Bioassay was subcontracted to another laboratory.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 10237 | VOCs- Solid by 8260B | SW-846 8260B | 1 | B152023AA | 07/22/2015 02:00 | Christopher G Torres | 1.1 |
| 00374 | GC/MS - Bulk Soil Prep | SW-846 5035A Modified | 1 | 201519738266 | 07/16/2015 15:41 | Mitchell R Washel | n.a. |
| 00374 | GC/MS - Bulk Soil Prep | SW-846 5035A Modified | 2 | 201519738266 | 07/16/2015 15:42 | Mitchell R Washel | n.a. |
| 06646 | GC/MS HL Bulk Sample Prep | SW-846 5035A Modified | 1 | 201519738266 | 07/16/2015 15:36 | Mitchell R Washel | n.a. |
| 10728 | Skinner 8270 (microwave) | SW-846 8270C | 1 | 15199SLB026 | 07/21/2015 01:00 | Catherine E Bachman | 10 |
| 10812 | BNA Soil Microwave Skinner | SW-846 3546 | 1 | 15199SLB026 | 07/19/2015 08:00 | Olivia Arosemena | 1 |
| 01637 | TPH-GRO soil C6-C10 | SW-846 8015B | 1 | 15198A31A | 07/18/2015 18:33 | Marie D Beamenderfer | 25.93 |
| 01150 | GC - Bulk Soil Prep | SW-846 5035A Modified | 1 | 201519738266 | 07/16/2015 15:37 | Mitchell R Washel | n.a. |
| 10941 | TPH-DRO soil C10-C28 microwave | SW-846 8015B | 1 | 151970024A | 07/21/2015 11:03 | Christine E Dolman | 25 |
| 10942 | Microwave Extraction-DRO soils | SW-846 3546 | 1 | 151970024A | 07/17/2015 08:15 | Olivia Arosemena | 1 |
| 06944 | Antimony | SW-846 6010B | 1 | 151975708002 | 07/20/2015 20:13 | Suzanne M Will | 1 |
| 06935 | Arsenic | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06946 | Barium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |

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# Analysis Report

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
Bin Storage Area/TTLC

LL Sample # SW 7968726
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

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Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

12959

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 06947 | Beryllium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06949 | Cadmium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06951 | Chromium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06952 | Cobalt | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06953 | Copper | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06955 | Lead | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06960 | Molybdenum | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06961 | Nickel | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06936 | Selenium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06966 | Silver | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06925 | Thallium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06971 | Vanadium | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 06972 | Zinc | SW-846 6010B | 1 | 151975708002 | 07/18/2015 02:04 | Elaine F Stoltzfus | 1 |
| 00159 | Mercury | SW-846 7471A | 1 | 151975711001 | 07/20/2015 09:42 | Damary Valentin | 1 |
| 05708 | ICP-ICPMS - SW, 3050B - U3 | SW-846 3050B | 1 | 151975708002 | 07/16/2015 22:00 | Annamaria Kuhns | 1 |
| 05711 | Hg-SW, 7471A - U3 | SW-846 7471A modified | 1 | 151975711001 | 07/17/2015 03:50 | Annamaria Kuhns | 1 |
| 00394 | pH | SW-846 9045C modified | 1 | 15197039401B | 07/16/2015 21:30 | Luz M Groff | 1 |
| 00111 | Moisture | SM 2540 G-1997 | 1 | 15198820004B | 07/17/2015 23:06 | Scott W Freisher | 1 |

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# Analysis Report

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
TCLP NVE Bin Storage Area/TCLP NON-VOA LEACH. EXT

LL Sample # TL 7968727
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

N2959

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| **GC/MS Semivolatiles** | **SW-846 8270C** | | mg/l | mg/l | |
| 00949 | 1,4-Dichlorobenzene | 106-46-7 | N.D. | 0.003 | 1 |
| 00949 | 2,4-Dinitrotoluene | 121-14-2 | N.D. | 0.005 | 1 |
| 00949 | Hexachlorobenzene | 118-74-1 | N.D. | 0.0005 | 1 |
| 00949 | Hexachlorobutadiene | 87-68-3 | N.D. | 0.003 | 1 |
| 00949 | Hexachloroethane | 67-72-1 | N.D. | 0.005 | 1 |
| 00949 | 2-Methylphenol | 95-48-7 | N.D. | 0.003 | 1 |
| 00949 | 4-Methylphenol | 106-44-5 | N.D. | 0.003 | 1 |
| | 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total of both compounds. | | | | |
| 00949 | Nitrobenzene | 98-95-3 | N.D. | 0.003 | 1 |
| 00949 | Pentachlorophenol | 87-86-5 | N.D. | 0.005 | 1 |
| 00949 | Pyridine | 110-86-1 | N.D. | 0.010 | 1 |
| 00949 | 2,4,5-Trichlorophenol | 95-95-4 | N.D. | 0.003 | 1 |
| 00949 | 2,4,6-Trichlorophenol | 88-06-2 | N.D. | 0.003 | 1 |
| **Metals** | **SW-846 6010B** | | mg/l | mg/l | |
| 07035 | Arsenic | 7440-38-2 | N.D. | 0.0070 | 1 |
| 07046 | Barium | 7440-39-3 | 0.657 | 0.00030 | 1 |
| 07049 | Cadmium | 7440-43-9 | N.D. | 0.00030 | 1 |
| 07051 | Chromium | 7440-47-3 | N.D. | 0.0015 | 1 |
| 07055 | Lead | 7439-92-1 | 0.0069 J | 0.0051 | 1 |
| 07036 | Selenium | 7782-49-2 | N.D. | 0.0082 | 1 |
| 07066 | Silver | 7440-22-4 | N.D. | 0.0014 | 1 |
| | **SW-846 7470A** | | mg/l | mg/l | |
| 00259 | Mercury | 7439-97-6 | N.D. | 0.000050 | 1 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 00949 | TCLP Acid Base/Neutrals | SW-846 8270C | 1 | 15204WAJ026 | 07/24/2015 21:59 | William H Saadeh | 1 |
| 04731 | TCLP Leachate Extraction | SW-846 3510C | 2 | 15204WAJ026 | 07/24/2015 09:30 | David S Schrum | 1 |
| 07035 | Arsenic | SW-846 6010B | 1 | 152025705001 | 07/22/2015 09:19 | Eric L Eby | 1 |
| 07046 | Barium | SW-846 6010B | 1 | 152025705001 | 07/22/2015 09:19 | Eric L Eby | 1 |
| 07049 | Cadmium | SW-846 6010B | 1 | 152025705001 | 07/22/2015 09:19 | Eric L Eby | 1 |

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Environmental

# Analysis Report

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Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
TCLP NVE Bin Storage Area/TCLP NON-VOA LEACH. EXT

LL Sample # TL 7968727
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

N2959

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 07051 | Chromium | SW-846 6010B | 1 | 152025705001 | 07/22/2015 09:19 | Eric L Eby | 1 |
| 07055 | Lead | SW-846 6010B | 1 | 152025705001 | 07/22/2015 09:19 | Eric L Eby | 1 |
| 07036 | Selenium | SW-846 6010B | 1 | 152025705001 | 07/22/2015 14:16 | Eric L Eby | 1 |
| 07066 | Silver | SW-846 6010B | 1 | 152025705001 | 07/22/2015 09:19 | Eric L Eby | 1 |
| 00259 | Mercury | SW-846 7470A | 1 | 152025713001 | 07/22/2015 09:50 | Damary Valentin | 1 |
| 05705 | ICP-WW/TL, 3010A (tot) - U3 | SW-846 3010A | 1 | 152025705001 | 07/22/2015 00:05 | Annamaria Kuhns | 1 |
| 05713 | WW SW846 Hg Digest | SW-846 7470A | 1 | 152025713001 | 07/22/2015 01:45 | Annamaria Kuhns | 1 |
| 00947 | TCLP Non-volatile Extraction | SW-846 1311 | 1 | 15201-2486-0947B | 07/20/2015 12:00 | Christina A Huber | n.a. |

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# Analysis Report

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
TCLP ZHE Bin Storage Area/TCLP ZERO HSP. EXT.

LL Sample # TL 7968728
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

Z2959

| CAT No. | Analysis Name | CAS Number | Result | Method Detection Limit | Dilution Factor |
|---|---|---|---|---|---|
| GC/MS Volatiles | SW-846 8260B | | mg/l | mg/l | |
| 03636 | Benzene | 71-43-2 | N.D. | 0.010 | 20 |
| 03636 | 2-Butanone | 78-93-3 | N.D. | 0.060 | 20 |
| 03636 | Carbon Tetrachloride | 56-23-5 | N.D. | 0.010 | 20 |
| 03636 | Chlorobenzene | 108-90-7 | N.D. | 0.010 | 20 |
| 03636 | Chloroform | 67-66-3 | N.D. | 0.010 | 20 |
| 03636 | 1,2-Dichloroethane | 107-06-2 | N.D. | 0.010 | 20 |
| 03636 | 1,1-Dichloroethene | 75-35-4 | N.D. | 0.010 | 20 |
| 03636 | Tetrachloroethene | 127-18-4 | N.D. | 0.010 | 20 |
| 03636 | Trichloroethene | 79-01-6 | N.D. | 0.010 | 20 |
| 03636 | Vinyl Chloride | 75-01-4 | N.D. | 0.010 | 20 |

## General Sample Comments

CA ELAP Lab Certification No. 2792

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 03636 | TCLP VOCs by 8260B | SW-846 8260B | 1 | N152021AA | 07/21/2015 22:59 | Amanda K Richards | 20 |
| 01163 | GC/MS VOA Water Prep | SW-846 5030B | 1 | N152021AA | 07/21/2015 22:59 | Amanda K Richards | 20 |
| 02573 | CA TCLP ZHE | SW-846 1311 | 1 | 15201-482-2573 | 07/20/2015 13:30 | Darin P Wagner | 1 |

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# Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: 12959 P20558 Contaminated Soil non RCRA Composite
Solid Job#: 12835 Cost Ctr.: DWRRICF2185EX
STLC NVE Bin Storage Area/STLC WET LEACH. EXT.

LL Sample # TL 7968729
LL Group # 1577316
Account # 10845

Project Name: 12959/Bin Storage Area

Collected: 07/15/2015 13:00 by FJ

Submitted: 07/16/2015 09:25
Reported: 07/27/2015 12:48

Chevron Products Company
Richmond Refinery
940 Hensley Street Bldg. 210
Richmond CA 94801

## General Sample Comments

CA ELAP Lab Certification No. 2792
The amount of sample collected for metals analysis was 250mL and the volume of preservation fluid added to the sample was 10mL.

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

## Laboratory Sample Analysis Record

| CAT No. | Analysis Name | Method | Trial# | Batch# | Analysis Date and Time | Analyst | Dilution Factor |
|---|---|---|---|---|---|---|---|
| 01435 | Non-volatile WET | CCR Title 22 WET Sec 66700 | 1 | 15203-482-1435 | 07/22/2015 10:35 | Darin P Wagner | n.a. |

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

## Laboratory Compliance Quality Control

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: B152023AA | Sample number(s): 7968726 | | | | | | | |
| Benzene | N.D. | 0.0005 | mg/kg | 97 | 95 | 80-120 | 2 | 30 |
| 2-Butanone | N.D. | 0.004 | mg/kg | 89 | 77 | 62-123 | 15 | 30 |
| Carbon Disulfide | N.D. | 0.001 | mg/kg | 105 | 102 | 52-126 | 3 | 30 |
| Carbon Tetrachloride | N.D. | 0.001 | mg/kg | 111 | 106 | 69-130 | 4 | 30 |
| Chlorobenzene | N.D. | 0.001 | mg/kg | 95 | 92 | 80-120 | 3 | 30 |
| Chloroform | N.D. | 0.001 | mg/kg | 101 | 99 | 80-120 | 2 | 30 |
| 1,2-Dibromoethane | N.D. | 0.001 | mg/kg | 101 | 93 | 80-120 | 9 | 30 |
| 1,2-Dichloroethane | N.D. | 0.001 | mg/kg | 107 | 102 | 77-130 | 5 | 30 |
| 1,1-Dichloroethene | N.D. | 0.001 | mg/kg | 106 | 104 | 73-129 | 2 | 30 |
| 1,4-Dioxane | N.D. | 0.070 | mg/kg | 97 | 85 | 58-124 | 13 | 30 |
| Ethylbenzene | N.D. | 0.001 | mg/kg | 92 | 90 | 80-120 | 2 | 30 |
| n-Hexane | N.D. | 0.001 | mg/kg | 88 | 88 | 44-120 | 0 | 30 |
| Isopropylbenzene | N.D. | 0.001 | mg/kg | 94 | 92 | 76-120 | 2 | 30 |
| Methylene Chloride | N.D. | 0.002 | mg/kg | 104 | 100 | 80-124 | 4 | 30 |
| Styrene | N.D. | 0.001 | mg/kg | 90 | 87 | 76-120 | 3 | 30 |
| Tetrachloroethene | N.D. | 0.001 | mg/kg | 99 | 97 | 78-120 | 2 | 30 |
| Toluene | N.D. | 0.001 | mg/kg | 94 | 92 | 80-120 | 2 | 30 |
| Trichloroethene | N.D. | 0.001 | mg/kg | 100 | 97 | 80-120 | 3 | 30 |
| 1,2,4-Trimethylbenzene | N.D. | 0.001 | mg/kg | 90 | 89 | 79-120 | 0 | 30 |
| Vinyl Chloride | N.D. | 0.001 | mg/kg | 93 | 91 | 59-120 | 1 | 30 |
| Xylene (Total) | N.D. | 0.001 | mg/kg | 92 | 91 | 80-120 | 2 | 30 |
| Batch number: N152021AA | Sample number(s): 7968728 | | | | | | | |
| Benzene | N.D. | 0.0005 | mg/l | 106 | | 78-120 | | |
| 2-Butanone | N.D. | 0.003 | mg/l | 124 | | 54-133 | | |
| Carbon Tetrachloride | N.D. | 0.0005 | mg/l | 104 | | 74-130 | | |
| Chlorobenzene | N.D. | 0.0005 | mg/l | 107 | | 80-120 | | |
| Chloroform | N.D. | 0.0005 | mg/l | 111 | | 80-120 | | |
| 1,2-Dichloroethane | N.D. | 0.0005 | mg/l | 119 | | 72-127 | | |
| 1,1-Dichloroethene | N.D. | 0.0005 | mg/l | 99 | | 76-124 | | |
| Tetrachloroethene | N.D. | 0.0005 | mg/l | 96 | | 80-120 | | |
| Trichloroethene | N.D. | 0.0005 | mg/l | 105 | | 80-120 | | |
| Vinyl Chloride | N.D. | 0.0005 | mg/l | 107 | | 69-120 | | |
| Batch number: 15199SLB026 | Sample number(s): 7968726 | | | | | | | |
| Anthracene | N.D. | 0.0033 | mg/kg | 101 | | 82-118 | | |
| Benzenethiol | N.D. | 0.33 | mg/kg | | | | | |
| Benzo(a)anthracene | N.D. | 0.0033 | mg/kg | 95 | | 76-119 | | |
| Benzo(a)pyrene | N.D. | 0.0033 | mg/kg | 91 | | 85-117 | | |
| Benzo(b)fluoranthene | N.D. | 0.0033 | mg/kg | 97 | | 78-129 | | |
| Benzo(k)fluoranthene | N.D. | 0.0033 | mg/kg | 94 | | 79-120 | | |
| 1,1'-Biphenyl | N.D. | 0.017 | mg/kg | 98 | | 78-111 | | |
| Butylbenzylphthalate | N.D. | 0.067 | mg/kg | 94 | | 80-118 | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Di-n-butylphthalate | N.D. | 0.067 | mg/kg | 97 | | 84-120 | | |
| Chrysene | N.D. | 0.0033 | mg/kg | 95 | | 80-121 | | |
| Dibenz(a,h)acridine | N.D. | 0.033 | mg/kg | 103 | | 73-137 | | |
| Dibenz(a,h)anthracene | N.D. | 0.0033 | mg/kg | 94 | | 81-123 | | |
| 1,2-Dichlorobenzene | N.D. | 0.017 | mg/kg | 94 | | 79-112 | | |
| 1,3-Dichlorobenzene | N.D. | 0.017 | mg/kg | 92 | | 79-113 | | |
| 1,4-Dichlorobenzene | N.D. | 0.017 | mg/kg | 92 | | 79-112 | | |
| Diethylphthalate | N.D. | 0.067 | mg/kg | 93 | | 81-118 | | |
| 7,12-Dimethylbenz[a]anthracene | N.D. | 0.017 | mg/kg | 93 | | 85-116 | | |
| 2,4-Dimethylphenol | N.D. | 0.017 | mg/kg | 94 | | 83-120 | | |
| Dimethylphthalate | N.D. | 0.067 | mg/kg | 94 | | 82-113 | | |
| 2,4-Dinitrophenol | N.D. | 0.30 | mg/kg | 81 | | 47-130 | | |
| 2,4-Dinitrotoluene | N.D. | 0.067 | mg/kg | 95 | | 81-122 | | |
| bis(2-Ethylhexyl)phthalate | N.D. | 0.067 | mg/kg | 92 | | 81-121 | | |
| Fluoranthene | N.D. | 0.0033 | mg/kg | 95 | | 81-117 | | |
| Hexachlorobenzene | N.D. | 0.0033 | mg/kg | 98 | | 75-123 | | |
| Hexachlorobutadiene | N.D. | 0.017 | mg/kg | 97 | | 78-121 | | |
| Hexachloroethane | N.D. | 0.033 | mg/kg | 92 | | 78-114 | | |
| Indene | N.D. | 0.033 | mg/kg | 96 | | 83-116 | | |
| 6-Methylchrysene | N.D. | 0.033 | mg/kg | 92 | | 77-108 | | |
| 1-Methylnaphthalene | N.D. | 0.0033 | mg/kg | 91 | | 77-115 | | |
| 2-Methylnaphthalene | N.D. | 0.0033 | mg/kg | 89 | | 83-109 | | |
| 2-Methylphenol | N.D. | 0.017 | mg/kg | 103 | | 82-125 | | |
| 4-Methylphenol | N.D. | 0.017 | mg/kg | 91 | | 75-119 | | |
| Naphthalene | N.D. | 0.0033 | mg/kg | 94 | | 83-112 | | |
| Nitrobenzene | N.D. | 0.017 | mg/kg | 96 | | 80-115 | | |
| 4-Nitrophenol | N.D. | 0.17 | mg/kg | 77 | | 60-129 | | |
| Di-n-octylphthalate | N.D. | 0.067 | mg/kg | 101 | | 82-134 | | |
| Pentachlorophenol | N.D. | 0.033 | mg/kg | 93 | | 57-126 | | |
| Phenanthrene | N.D. | 0.0033 | mg/kg | 95 | | 80-114 | | |
| Phenol | N.D. | 0.017 | mg/kg | 102 | | 75-117 | | |
| Pyrene | N.D. | 0.0033 | mg/kg | 95 | | 81-114 | | |
| Pyridine | N.D. | 0.067 | mg/kg | 82 | | 55-118 | | |
| Quinoline | N.D. | 0.033 | mg/kg | 90 | | 84-111 | | |
| 2,4,5-Trichlorophenol | N.D. | 0.017 | mg/kg | 96 | | 86-123 | | |
| 2,4,6-Trichlorophenol | N.D. | 0.017 | mg/kg | 100 | | 81-123 | | |
| Batch number: 15204WAJ026 | Sample number(s): 7968727 | | | | | | | |
| 1,4-Dichlorobenzene | N.D. | 0.003 | mg/l | 71 | | 56-106 | | |
| 2,4-Dinitrotoluene | N.D. | 0.005 | mg/l | 97 | | 77-124 | | |
| Hexachlorobenzene | N.D. | 0.0005 | mg/l | 114 | | 73-118 | | |
| Hexachlorobutadiene | N.D. | 0.003 | mg/l | 78 | | 42-110 | | |
| Hexachloroethane | N.D. | 0.005 | mg/l | 64 | | 43-108 | | |
| 2-Methylphenol | N.D. | 0.003 | mg/l | 89 | | 66-112 | | |
| 4-Methylphenol | N.D. | 0.003 | mg/l | 86 | | 56-109 | | |
| Nitrobenzene | N.D. | 0.003 | mg/l | 98 | | 77-119 | | |
| Pentachlorophenol | N.D. | 0.005 | mg/l | 98 | | 50-121 | | |
| Pyridine | N.D. | 0.010 | mg/l | 45 | | 22-96 | | |
| 2,4,5-Trichlorophenol | N.D. | 0.003 | mg/l | 88 | | 76-116 | | |
| 2,4,6-Trichlorophenol | N.D. | 0.003 | mg/l | 96 | | 75-117 | | |
| Batch number: 15198A31A | Sample number(s): 7968726 | | | | | | | |
| TPH-GRO soil C6-C10 | N.D. | 0.2 | mg/kg | 78 | 76 | 61-120 | 2 | 30 |
| Batch number: 151970024A | Sample number(s): 7968726 | | | | | | | |
| TPH-DRO soil C10-C28 microwave | N.D. | 4.0 | mg/kg | 101 | | 81-121 | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

| Analysis Name | Blank Result | Blank MDL | Report Units | LCS %REC | LCSD %REC | LCS/LCSD Limits | RPD | RPD Max |
|---|---|---|---|---|---|---|---|---|
| Batch number: 151975708002 | Sample number(s): 7968726 | | | | | | | |
| Antimony | N.D. | 0.410 | mg/kg | 107 | | 80-120 | | |
| Arsenic | N.D. | 0.640 | mg/kg | 105 | | 80-120 | | |
| Barium | N.D. | 0.0330 | mg/kg | 99 | | 80-120 | | |
| Beryllium | N.D. | 0.0670 | mg/kg | 104 | | 80-120 | | |
| Cadmium | 0.0440 J | 0.0330 | mg/kg | 102 | | 80-120 | | |
| Chromium | 0.115 J | 0.110 | mg/kg | 101 | | 80-120 | | |
| Cobalt | N.D. | 0.0960 | mg/kg | 103 | | 80-120 | | |
| Copper | N.D. | 0.330 | mg/kg | 102 | | 80-120 | | |
| Lead | N.D. | 0.500 | mg/kg | 104 | | 80-120 | | |
| Molybdenum | N.D. | 0.170 | mg/kg | 99 | | 80-120 | | |
| Nickel | N.D. | 0.150 | mg/kg | 104 | | 80-120 | | |
| Selenium | N.D. | 0.440 | mg/kg | 99 | | 80-120 | | |
| Silver | N.D. | 0.190 | mg/kg | 94 | | 80-120 | | |
| Thallium | N.D. | 0.800 | mg/kg | 102 | | 80-120 | | |
| Vanadium | N.D. | 0.0910 | mg/kg | 104 | | 80-120 | | |
| Zinc | N.D. | 0.260 | mg/kg | 99 | | 80-120 | | |
| Batch number: 151975711001 | Sample number(s): 7968726 | | | | | | | |
| Mercury | N.D. | 0.0100 | mg/kg | 98 | | 80-120 | | |
| Batch number: 152025705001 | Sample number(s): 7968727 | | | | | | | |
| Arsenic | N.D. | 0.0070 | mg/l | 112 | | 80-120 | | |
| Barium | 0.00087 J | 0.00030 | mg/l | 95 | | 80-120 | | |
| Cadmium | N.D. | 0.00030 | mg/l | 99 | | 80-120 | | |
| Chromium | N.D. | 0.0015 | mg/l | 100 | | 80-120 | | |
| Lead | N.D. | 0.0051 | mg/l | 97 | | 80-120 | | |
| Selenium | N.D. | 0.0082 | mg/l | 115 | | 80-120 | | |
| Silver | 0.0022 J | 0.0014 | mg/l | 96 | | 80-120 | | |
| Batch number: 152025713001 | Sample number(s): 7968727 | | | | | | | |
| Mercury | N.D. | 0.00005 0 | mg/l | 104 | | 80-120 | | |
| Batch number: 15197039401B | Sample number(s): 7968726 | | | | | | | |
| pH | | | | 100 | | 95-105 | | |
| Batch number: 15198820004B | Sample number(s): 7968726 | | | | | | | |
| Moisture | | | | 100 | | 99-101 | | |

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: N152021AA | Sample number(s): 7968728 UNSPK: P959675 | | | | | | | | |
| Benzene | 107 | 93 | 72-134 | 11 | 30 | | | | |
| 2-Butanone | 113 | 100 | 44-135 | 13 | 30 | | | | |
| Carbon Tetrachloride | 111 | 97 | 75-148 | 14 | 30 | | | | |
| Chlorobenzene | 105 | 92 | 87-124 | 13 | 30 | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Chloroform | 107 | 95 | 81-134 | 13 | 30 | | | | |
| 1,2-Dichloroethane | 117 | 100 | 63-142 | 15 | 30 | | | | |
| 1,1-Dichloroethene | 105 | 93 | 79-137 | 12 | 30 | | | | |
| Tetrachloroethene | 96 | 87 | 80-128 | 10 | 30 | | | | |
| Trichloroethene | 107 | 93 | 88-133 | 14 | 30 | | | | |
| Vinyl Chloride | 111 | 120 | 66-133 | 8 | 30 | | | | |
| Batch number: 15199SLB026 | Sample number(s): 7968726 UNSPK: P967134 | | | | | | | | |
| Anthracene | 97 | 98 | 42-147 | 1 | 30 | | | | |
| Benzo(a)anthracene | 90 | 92 | 32-150 | 2 | 30 | | | | |
| Benzo(a)pyrene | 87 | 89 | 36-151 | 2 | 30 | | | | |
| Benzo(b)fluoranthene | 91 | 101 | 29-150 | 11 | 30 | | | | |
| Benzo(k)fluoranthene | 90 | 84 | 35-146 | 7 | 30 | | | | |
| 1,1'-Biphenyl | 99 | 103 | 34-145 | 4 | 30 | | | | |
| Butylbenzylphthalate | 94 | 93 | 50-137 | 0 | 30 | | | | |
| Di-n-butylphthalate | 95 | 96 | 65-126 | 2 | 30 | | | | |
| Chrysene | 95 | 92 | 28-146 | 2 | 30 | | | | |
| Dibenz(a,h)acridine | 107 | 108 | 10-159 | 2 | 30 | | | | |
| Dibenz(a,h)anthracene | 96 | 97 | 38-156 | 2 | 30 | | | | |
| 1,2-Dichlorobenzene | 94 | 91 | 51-130 | 2 | 30 | | | | |
| 1,3-Dichlorobenzene | 92 | 91 | 51-125 | 1 | 30 | | | | |
| 1,4-Dichlorobenzene | 92 | 91 | 50-127 | 0 | 30 | | | | |
| Diethylphthalate | 87 | 88 | 61-124 | 2 | 30 | | | | |
| 7,12-Dimethylbenz[a]anthracene | 79 | 81 | 62-117 | 3 | 30 | | | | |
| 2,4-Dimethylphenol | 88 | 90 | 38-140 | 3 | 30 | | | | |
| Dimethylphthalate | 89 | 92 | 59-124 | 4 | 30 | | | | |
| 2,4-Dinitrophenol | 61 | 59 | 20-143 | 3 | 30 | | | | |
| 2,4-Dinitrotoluene | 83 | 86 | 37-149 | 5 | 30 | | | | |
| bis(2-Ethylhexyl)phthalate | 96 | 92 | 60-133 | 3 | 30 | | | | |
| Fluoranthene | 86 | 86 | 41-135 | 1 | 30 | | | | |
| Hexachlorobenzene | 98 | 99 | 36-150 | 2 | 30 | | | | |
| Hexachlorobutadiene | 102 | 105 | 65-125 | 4 | 30 | | | | |
| Hexachloroethane | 86 | 83 | 37-143 | 2 | 30 | | | | |
| Indene | 93 | 91 | 44-124 | 2 | 30 | | | | |
| 6-Methylchrysene | 92 | 92 | 61-120 | 1 | 30 | | | | |
| 1-Methylnaphthalene | 89 | 88 | 68-121 | 1 | 30 | | | | |
| 2-Methylnaphthalene | 86 | 86 | 39-140 | 1 | 30 | | | | |
| 2-Methylphenol | 92 | 92 | 36-149 | 1 | 30 | | | | |
| 4-Methylphenol | 83 | 80 | 46-135 | 4 | 30 | | | | |
| Naphthalene | 95 | 95 | 39-147 | 1 | 30 | | | | |
| Nitrobenzene | 95 | 94 | 54-131 | 0 | 30 | | | | |
| 4-Nitrophenol | 72 | 70 | 25-142 | 2 | 30 | | | | |
| Di-n-octylphthalate | 97 | 99 | 53-156 | 3 | 30 | | | | |
| Pentachlorophenol | 96 | 95 | 23-145 | 1 | 30 | | | | |
| Phenanthrene | 93 | 93 | 42-141 | 1 | 30 | | | | |
| Phenol | 93 | 94 | 53-129 | 2 | 30 | | | | |
| Pyrene | 93 | 91 | 37-140 | 1 | 30 | | | | |
| Pyridine | 18* | 22* | 24-119 | 18 | 30 | | | | |
| Quinoline | 54 | 56 | 10-175 | 4 | 30 | | | | |
| 2,4,5-Trichlorophenol | 90 | 94 | 42-144 | 5 | 30 | | | | |
| 2,4,6-Trichlorophenol | 99 | 103 | 43-145 | 4 | 30 | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Batch number: 15204WAJ026 | Sample number(s): 7968727 UNSPK: P971096 | | | | | | | | |
| 1,4-Dichlorobenzene | 78 | 74 | 51-108 | 5 | 30 | | | | |
| 2,4-Dinitrotoluene | 82 | 89 | 51-145 | 8 | 30 | | | | |
| Hexachlorobenzene | 109 | 109 | 71-119 | 0 | 30 | | | | |
| Hexachlorobutadiene | 86 | 89 | 44-113 | 3 | 30 | | | | |
| Hexachloroethane | 73 | 70 | 32-120 | 4 | 30 | | | | |
| 2-Methylphenol | 76 | 76 | 27-132 | 0 | 30 | | | | |
| 4-Methylphenol | 72 | 74 | 13-128 | 3 | 30 | | | | |
| Nitrobenzene | 99 | 99 | 50-143 | 0 | 30 | | | | |
| Pentachlorophenol | 94 | 96 | 23-140 | 2 | 30 | | | | |
| Pyridine | 63 | 60 | 20-91 | 4 | 30 | | | | |
| 2,4,5-Trichlorophenol | 85 | 88 | 34-143 | 3 | 30 | | | | |
| 2,4,6-Trichlorophenol | 90 | 97 | 19-162 | 8 | 30 | | | | |
| Batch number: 151970024A | Sample number(s): 7968726 UNSPK: P967483 BKG: P967483 | | | | | | | | |
| TPH-DRO soil C10-C28 microwave | 80 | | 35-129 | | | 4.4 J | N.D. | 200* (1) | 20 |
| Batch number: 151975708002 | Sample number(s): 7968726 UNSPK: P966107 BKG: P966107 | | | | | | | | |
| Antimony | 83 | 76 | 75-125 | 6 | 20 | 13.0 | 11.3 | 14 | 20 |
| Arsenic | 47* | 45* | 75-125 | 3 | 20 | 1.50 J | 1.34 J | 11 (1) | 20 |
| Barium | 74* | 71* | 75-125 | 1 | 20 | 379 | 283 | 29* | 20 |
| Beryllium | 109 | 106 | 75-125 | 2 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Cadmium | 106 | 104 | 75-125 | 1 | 20 | 3.20 | 3.22 | 1 | 20 |
| Chromium | -156 (2) | -146 (2) | 75-125 | 0 | 20 | 599 | 550 | 9 | 20 |
| Cobalt | 82 | 83 | 75-125 | 0 | 20 | 186 | 184 | 1 | 20 |
| Copper | 112 | 108 | 75-125 | 2 | 20 | 32.3 | 27.1 | 18 | 20 |
| Lead | -627 (2) | -1776 (2) | 75-125 | 8 | 20 | 2,400 | 1,810 | 28* | 20 |
| Molybdenum | 83 | 82 | 75-125 | 2 | 20 | 1.19 | 0.979 J | 20 (1) | 20 |
| Nickel | 101 | 99 | 75-125 | 1 | 20 | 7.94 | 7.57 | 5 | 20 |
| Selenium | 54* | 53* | 75-125 | 2 | 20 | N.D. | 0.701 J | 200* (1) | 20 |
| Silver | 74* | 74* | 75-125 | 0 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Thallium | 85 | 86 | 75-125 | 1 | 20 | 1.10 J | 1.22 J | 11 (1) | 20 |
| Vanadium | 112 | 110 | 75-125 | 2 | 20 | 5.88 | 5.35 | 9 | 20 |
| Zinc | 326 (2) | -134 (2) | 75-125 | 1 | 20 | 17,000 | 16,700 | 2 | 20 |
| Batch number: 151975711001 | Sample number(s): 7968726 UNSPK: P966090 BKG: P966090 | | | | | | | | |
| Mercury | -149 (2) | -69 (2) | 80-120 | 11 | 20 | 1.36 | 0.983 | 32* (1) | 20 |
| Batch number: 152025705001 | Sample number(s): 7968727 UNSPK: P966307 BKG: P966307 | | | | | | | | |
| Arsenic | 100 | 101 | 75-125 | 1 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Barium | 88 | 90 | 75-125 | 1 | 20 | 0.879 | 0.892 | 2 | 20 |
| Cadmium | 89 | 90 | 75-125 | 1 | 20 | 0.0062 | 0.0061 | 2 (1) | 20 |
| Chromium | 89 | 90 | 75-125 | 1 | 20 | 0.0050 J | 0.0036 J | 33* (1) | 20 |
| Lead | 87 | 88 | 75-125 | 1 | 20 | 0.268 | 0.273 | 2 | 20 |
| Selenium | 105 | 108 | 75-125 | 2 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Silver | 77 | 80 | 75-125 | 4 | 20 | N.D. | 0.0018 J | 200* (1) | 20 |
| Batch number: 152025713001 | Sample number(s): 7968727 UNSPK: P966307 BKG: P966307 | | | | | | | | |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

## Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

| Analysis Name | MS %REC | MSD %REC | MS/MSD Limits | RPD | RPD MAX | BKG Conc | DUP Conc | DUP RPD | Dup RPD Max |
|---|---|---|---|---|---|---|---|---|---|
| Mercury | 88 | 85 | 80-120 | 4 | 20 | N.D. | N.D. | 0 (1) | 20 |
| Batch number: 15197039401B | Sample number(s): 7968726 | | | | BKG: P968866 | | | | |
| pH | | | | | | 4.89 | 4.87 | 0 | 3 |
| Batch number: 15198820004B | Sample number(s): 7968726 | | | | BKG: P963249 | | | | |
| Moisture | | | | | | 6.9 | 6.8 | 2 | 5 |

## Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: VOCs- Solid by 8260B
Batch number: B152023AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---|---|---|---|---|
| 7968726 | 112 | 106 | 104 | 97 |
| Blank | 106 | 103 | 98 | 96 |
| LCS | 108 | 114 | 101 | 100 |
| LCSD | 107 | 106 | 101 | 100 |
| Limits: | 50-141 | 54-135 | 52-141 | 50-131 |

Analysis Name: TCLP VOCs by 8260B
Batch number: N152021AA

| | Dibromofluoromethane | 1,2-Dichloroethane-d4 | Toluene-d8 | 4-Bromofluorobenzene |
|---|---|---|---|---|
| 7968728 | 106 | 102 | 104 | 95 |
| Blank | 110 | 104 | 105 | 95 |
| LCS | 102 | 98 | 109 | 105 |
| MS | 102 | 102 | 108 | 105 |
| MSD | 102 | 103 | 109 | 105 |
| Limits: | 80-116 | 77-113 | 80-113 | 78-113 |

Analysis Name: Skinner 8270 (microwave)
Batch number: 15199SLB026

| | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 |
|---|---|---|---|---|---|---|
| 7968726 | 67 | 81 | 75 | 82 | 84 | 89 |
| Blank | 86 | 93 | 90 | 89 | 89 | 95 |
| LCS | 94 | 98 | 94 | 88 | 93 | 93 |
| MS | 86 | 93 | 83 | 88 | 94 | 92 |
| MSD | 85 | 92 | 85 | 88 | 97 | 92 |
| Limits: | 58-122 | 57-128 | 36-142 | 54-123 | 63-124 | 61-142 |

Analysis Name: TCLP Acid Base/Neutrals
Batch number: 15204WAJ026

| | Nitrobenzene-d5 | 2-Fluorobiphenyl | Terphenyl-d14 | Phenol-d6 | 2-Fluorophenol | 2,4,6-Tribromophenol |
|---|---|---|---|---|---|---|
| 7968727 | 92 | 83 | 63 | 26 | 36 | 78 |
| Blank | 95 | 78 | 104 | 44 | 65 | 102 |
| LCS | 93 | 89 | 99 | 44 | 65 | 97 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Quality Control Summary

Client Name: Chevron Products Company  Group Number: 1577316
Reported: 07/27/2015 12:48

## Surrogate Quality Control

| | | | | | | |
|---|---|---|---|---|---|---|
| MS | 91 | 85 | 83 | 40 | 60 | 91 |
| MSD | 92 | 88 | 79 | 38 | 59 | 94 |
| Limits: | 60-123 | 61-112 | 35-144 | 10-82 | 10-107 | 23-145 |

Analysis Name: TPH-GRO soil C6-C10
Batch number: 15198A31A

| | Trifluorotoluene-F |
|---|---|
| 7968726 | 93 |
| Blank | 103 |
| LCS | 108 |
| LCSD | 108 |
| Limits: | 50-142 |

Analysis Name: TPH-DRO soil C10-C28 microwave
Batch number: 151970024A

| | Orthoterphenyl |
|---|---|
| 7968726 | 107 |
| Blank | 96 |
| DUP | 73 |
| LCS | 94 |
| MS | 80 |
| Limits: | 54-145 |

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

# Chevron Richmond Refinery HES/HW Workgroup - Analytical Request / Chain of Custody

eurofins | Lancaster Laboratories

COC# Ø71515-Ø3 For Lancaster Laboratories use only Acct. # 10845 Grp. # 1577316 Sample #: 7968726-29

ject Name: Contaminated Soil Non RCRA
urce (Vessel & Plant Name) Fluid Channel FR ISOMAX
U: HW Job # 12835
cation of Material: Bin Storage Area
mpany Code: 0061 Richmond Refinery
S Element or Cost Center: DWRRICF2185EX
mple Requestor: Thelma Aquino
mpler(s) Name: Fred Jacobs / Clinton Hendricks
te of Origin: CA

Preservative Codes: Ø = None S = H2SO4 N = HNO3 B = NaOH H = HCl O = Other

Listed Waste: YES NO

Comments/Hazards

| mple Identification | Tank or Drum # | Date Collected | Time Collected | Grab | Composite | Matrix: Soil ☐ Solid ☒ | Matrix: Water ☐ Oil ☐ Other Liquid ☐ | Total Number of Containers | EPA 8260 BTEX ☐ Total Benzene ☒ | CCR Metals STLC ☒ Rush STLC ☒ No STLC ☐ | TCLP Metals ☐ Benzene ☐ Full ☒ | Ignitability (solids) ☐ Flashpoint ☐ | Reactivity | 25D | TPH - GRO/DRO | SKINNER LIST: VOL 8260 | SKINNER LIST: SVOL 8270 | pH | % MOISTURE | | Subcontract Analyses: Bioassay Screen: Alpha ☐ McCampbell ☒ | Dioxin: TCDD 2,3,7,8 ☐ Full List ☐ | TVP ☐ Sulfide ☐ Asbestos ☐ | Other Subcontract: | Other Remarks: |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12959 | P20558 | 7.15.15 | 1pm | | X | X | | 3 | X | X | X | | | | X | X | X | X | X | | X | | | | SUB |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |

*Shipped by Chevron ☐ *Shipped by LLI ☐ as # _____ of Dangerous Goods Shipments

| quished by: | Date | Time | Received by: | Date | Time |
|---|---|---|---|---|---|
| [signature] | 7.15.15 | 2:04pm | A. Salper | 15JUL15 | 1405 |
| quished by: A. Salper | 15JUL15 | 1630 | Received by: Airborne FedEx | | |
| quished by Commercial Carrier: irborne FedEx | | | Received by: [signature] | 7.16.15 | 925 |

Desired Completion Date: _____ or

Turn Around Time (TAT) (Circle one)
NOTE: Rush Surcharges apply 1 day
for all requests less than 3 day
10 working days 5 day
TAT Clock starts when received at LLI 10 day

perature Upon Receipt 0.5-1.4 °C Custody Seals Intact? Yes No

Lancaster Laboratories, Inc., 2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 (717) 656-2300



ED_001593_00025843

eurofins | Lancaster Laboratories Environmental

# Sample Administration Receipt Documentation Log

Doc Log ID: 87522

Group Number(s): 1577316

Client: Ca Office

## Delivery and Receipt Information

| | | | |
|---|---|---|---|
| Delivery Method: | BASC | Arrival Timestamp: | 07/16/2015 9:25 |
| Number of Packages: | 3 | Number of Projects: | 5 |
| State/Province of Origin: | CA | | |

## Arrival Condition Summary

| | | | |
|---|---|---|---|
| Shipping Container Sealed: | Yes | Sample IDs on COC match Containers: | Yes |
| Custody Seal Present: | Yes | Sample Date/Times match COC: | Yes |
| Custody Seal Intact: | Yes | VOA Vial Headspace ≥ 6mm: | N/A |
| Samples Chilled: | Yes | Total Trip Blank Qty: | 0 |
| Paperwork Enclosed: | Yes | Air Quality Samples Present: | No |
| Samples Intact: | Yes | | |
| Missing Samples: | No | | |
| Extra Samples: | No | | |
| Discrepancy in Container Qty on COC: | No | | |

*Unpacked by Brandy Barclay (2299) at 10:47 on 07/16/2015*

## Samples Chilled Details

*Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

| Cooler # | Thermometer ID | Corrected Temp | Therm. Type | Ice Type | Ice Present? | Ice Container | Elevated Temp? |
|---|---|---|---|---|---|---|---|
| 1 | DT146 | 1.4 | DT | Wet | Y | Bagged | N |
| 2 | DT146 | 0.5 | DT | Wet | Y | Bagged | N |
| 3 | DT146 | 0.5 | DT | Wet | Y | Bagged | N |



2425 New Holland Pike
Lancaster, PA 17605-2425



T : 717-656-2300
F : 717-656-2681
www.LancasterLabs.com

# Explanation of Symbols and Abbreviations

*The following defines common symbols and abbreviations used in reporting technical data:*

| | | | |
|---|---|---|---|
| **RL** | Reporting Limit | **BMQL** | Below Minimum Quantitation Level |
| **N.D.** | none detected | **MPN** | Most Probable Number |
| **TNTC** | Too Numerous To Count | **CP Units** | cobalt-chloroplatinate units |
| **IU** | International Units | **NTU** | nephelometric turbidity units |
| **umhos/cm** | micromhos/cm | **ng** | nanogram(s) |
| **C** | degrees Celsius | **F** | degrees Fahrenheit |
| **meq** | milliequivalents | **lb.** | pound(s) |
| **g** | gram(s) | **kg** | kilogram(s) |
| **µg** | microgram(s) | **mg** | milligram(s) |
| **mL** | milliliter(s) | **L** | liter(s) |
| **m3** | cubic meter(s) | **µL** | microliter(s) |
| | | **pg/L** | picogram/liter |

**<** less than

**>** greater than

**ppm** parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.

**ppb** parts per billion

**Dry weight basis** Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

*Laboratory Data Qualifiers:*

B - Analyte detected in the blank
C - Result confirmed by reanalysis
E - Concentration exceeds the calibration range
J (or G, I, X) - estimated value ≥ the Method Detection Limit (MDL or DL) and the < Limit of Quantitation (LOQ or RL)
P - Concentration difference between the primary and confirmation column >40%. The lower result is reported.
U - Analyte was not detected at the value indicated
V - Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference...

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

**Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, ISO17025) unless otherwise noted under the individual analysis.**

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

**WARRANTY AND LIMITS OF LIABILITY** - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

## CHEVRON USA INC RICHMOND REFINERY (CAD009114919) - (MAP) OPERATING PERMIT + PC UNITS

841 CHEVRON WAY
RICHMOND , CA 94801-4801
CONTRA COSTA COUNTY
**CALENVIROSCREEN SCORE:** 61-65%
**SITE CODE(S):** 200273, 200273

**DTSC PROJECT MANAGER:** HAI-YONG KANG
**DTSC PROJECT MANAGER LEAD:** LUNG-YIN TAI

PUBLIC PROFILE REPORT

**OTHER ENVIROSTOR PROJECTS ASSOCIATED WITH THIS PROJECT:**

| PROJECT NAME | ADDRESS | CITY | SITE TYPE | STATUS | PROJECT CONTACT |
|---|---|---|---|---|---|
| CHEVRON PRODUCTS CO | 841 CHEVRON WAY | RICHMOND | Corrective Action | Refer: RWQCB | |
| CHEVRON REFINERY | 841 STANDARD AVENUE | RICHMOND | * Historical | Refer: RCRA | |
| CHEVRON USA INC RICHMOND REFINERY | 841 CHEVRON WAY | RICHMOND | EERP Facility | | SERGIO CHAVEZ |

THIS PROJECT WAS LAST MODIFIED BY *MATTHEW MULLINAX* ON 12/16/2016 - VIEW/UPDATE HISTORY

**THIS PROJECT HAS OUTSTANDING CLEANUP ITEMS - CLICK HERE TO VIEW**

## PUBLIC DOCUMENTS

| | PERMIT ACTIVITY | EVENT DESC | TITLE | EVENT COMPLETION DATE | SIZE | FILE DESCRIPTION | |
|---|---|---|---|---|---|---|---|
| [VIEW] | CLOSURE | PLAN APPROVED | CLOSURE OF "LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS | 03/19/1998 | 127 | APPROVAL LETTER CLOSURE AND POST CLOSURE PLAN_3-19-1998.PDF | X |
| [VIEW] | NEW POST-CLOSURE PERMIT | FINAL PERMIT | POST CLOSURE PERMIT FOR ""LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS *MULTIPLE DOCUMENTS UPLOADED* | 03/04/2003 | --- | --- | |
| [VIEW] | NEW POST-CLOSURE PERMIT | PUBLIC COMMENT | POST CLOSURE PERMIT FOR ""LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS *MULTIPLE DOCUMENTS UPLOADED* | 12/13/2002 | --- | --- | |
| [VIEW] | NEW POST-CLOSURE PERMIT | DRAFT PERMIT | POST CLOSURE PERMIT FOR ""LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS | 12/13/2002 | 2264 | 021213_07_DRAFT PERMIT.PDF | X |
| [VIEW] | NEW POST-CLOSURE PERMIT | RESPONSE TO 1ST NOD RECEIVED | POST CLOSURE PERMIT FOR ""LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS *MULTIPLE DOCUMENTS UPLOADED* | 01/07/2002 | --- | --- | |
| [VIEW] | NEW POST-CLOSURE PERMIT | FINAL PART A & PART B RECEIVED | POST CLOSURE PERMIT FOR ""LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS | 01/07/2002 | 4236 | 020107_CVX_POST CLOSURE PERMIT APPLICATION REVISED_1-7-02_COMBINED.PDF | X |
| [VIEW] | NEW POST-CLOSURE PERMIT | INITIAL PART B RECEIVED | POST CLOSURE PERMIT FOR ""LANDAPP1, LANDAPP2, LANDAPP3, LANDAPP4, LANDAPP5" UNITS | 03/30/2000 | 69 | FACILITY LETTER SUBMITTAL OF POST CLOSURE PERMIT 2000.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | PUBLIC COMMENT | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS *MULTIPLE DOCUMENTS UPLOADED* | 08/01/2016 | --- | --- | |
| [VIEW] | PC RENEWAL PC - NO CHANGES | CEQA | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 08/01/2016 | 40 | 150130_NOE DRAFT_CHEVRON PCPERMIT RENEWAL_FINAL.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | DRAFT PERMIT | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 06/20/2016 | 1934 | 160620_DRAFT PERMIT_FINAL_CHEVRON PC LANDFARMS.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | TECHNICAL COMPLETE LETTER | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 06/10/2016 | 1015 | 160610_CVX_TECH CMPL DET LTR_ORINGINAL SIGNED BY.DOC.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | FINAL PART A & PART B RECEIVED | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS *MULTIPLE DOCUMENTS UPLOADED* | 10/22/2015 | --- | --- | |
| | PC RENEWAL | RESPONSE TO | POST CLOSURE PERMIT RENEWAL FOR | | | 150707_CHEVRON NOD | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| [VIEW] | PC - NO CHANGES | 2ND NOD RECEIVED | LANDFARMS | 07/03/2015 | 395 | RESPONSES.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | 2ND NOTICE OF DEFICIENCY ISSUED | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 05/19/2015 | 4500 | CHEVRON 2ND NOD DRAFT UNRESOLVED - FINAL LTR DTD 5-18-15 (JK).PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | RESPONSE TO 1ST NOD RECEIVED | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS *MULTIPLE DOCUMENTS UPLOADED* | 04/17/2015 | --- | --- | |
| [VIEW] | PC RENEWAL PC - NO CHANGES | DRAFT CEQA | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 01/30/2015 | 40 | 150130_NOE DRAFT_CHEVRON PCPERMIT RENEWAL_FINAL.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | 1ST NOTICE OF DEFICIENCY ISSUED | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 01/13/2015 | 992 | 150112_1ST NOD_CHEVRON PCPERMIT RENEWAL_SIGNED.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | ADMIN COMPLETENESS DETERMINATION LETTER | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS *MULTIPLE DOCUMENTS UPLOADED* | 12/21/2012 | --- | --- | |
| [VIEW] | PC RENEWAL PC - NO CHANGES | INITIAL PART A RECEIVED | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS *MULTIPLE DOCUMENTS UPLOADED* | 09/07/2012 | --- | --- | |
| [VIEW] | PC RENEWAL PC - NO CHANGES | INITIAL PART B RECEIVED | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 09/07/2012 | 22141 | LANDFARMS PART B - FINAL, SIZE REDUCED.PDF | X |
| [VIEW] | PC RENEWAL PC - NO CHANGES | CALL-IN LETTER | POST CLOSURE PERMIT RENEWAL FOR LANDFARMS | 08/15/2012 | 43 | CHEVRON LANDFARMS_DTSC CALL-IN LETTER_RENEWAL POST CLOSURE PERMIT_SIG REDUC_8-15-2012 .PDF | X |
| [VIEW] | RENEWAL - NO CHANGES | PERMIT RECEIVED | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY *MULTIPLE DOCUMENTS UPLOADED* | 11/08/2016 | --- | --- | |
| [VIEW] | RENEWAL - NO CHANGES | ADMIN COMPLETENESS DETERMINATION LETTER | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY | 05/13/2016 | 590 | ADMIN REVIEW COMPLETNESS LETTER 05 2016.PDF | X |
| [VIEW] | RENEWAL - NO CHANGES | INITIAL PART B RECEIVED | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY | 04/14/2016 | 13594 | HWTSF PERMIT APPLICATION (REV 0 APR 12 2016).PDF | X |
| [VIEW] | RENEWAL - NO CHANGES | INITIAL PART A RECEIVED | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY | 04/14/2016 | 13594 | HWTSF PERMIT APPLICATION (REV 0 APR 12 2016).PDF | X |
| [VIEW] | RENEWAL - NO CHANGES | CALL-IN LETTER | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY | 04/08/2015 | 1277 | 150408_CHEV-REFINERY-PERMIT-APP-CALL-IN-LETTER-TO-MR-ROGERS-DATED-APR-8-2015.PDF | X |
| [VIEW] | RENEWAL - WITH CHANGES | FINAL PERMIT | PERMIT RENEWAL 1 *MULTIPLE DOCUMENTS UPLOADED* | 09/06/2006 | --- | --- | |
| [VIEW] | RENEWAL - WITH CHANGES | PUBLIC COMMENT | PERMIT RENEWAL 1 | 04/14/2006 | 38 | PUBLIC HEARING.PDF | X |
| [VIEW] | RENEWAL - WITH CHANGES | FINAL PART A & PART B RECEIVED | PERMIT RENEWAL 1 | 04/27/2005 | 17875 | HWTSF PERMIT APPLICATION PART A & B. REV.6, DECEMBER 8, 2007.PDF | X |
| [VIEW] | RENEWAL - WITH CHANGES | INITIAL PART B RECEIVED | PERMIT RENEWAL 1 | 08/29/2001 | 17875 | HWTSF PERMIT APPLICATION PART A & B. REV.6, DECEMBER 8, 2007.PDF | X |
| [VIEW] | RENEWAL - WITH | CALL-IN LETTER | PERMIT RENEWAL 1 | 03/29/2001 | 619 | 2001 CALL-IN LETTER ISSUE FROM LISA AND | X |

**INTERNAL DOCUMENTS**

PERMIT FILE

| | ACTIVITY | EVENT DESC | TITLE | EVENT COMPLETION DATE | SIZE | DESCRIPTION | |
|---|---|---|---|---|---|---|---|
| [VIEW] | RENEWAL - NO CHANGES | DTSC APPLICANT MEETING | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY | 03/10/2016 | 329 | SIGNED PRE APP MEETING AGENDA 03 10 2016.PDF | X |
| [VIEW] | RENEWAL - NO CHANGES | DRAFT CEQA | HAZARDOUS WASTE FACILITY PERMIT RENEWAL FOR CHEVRON RICHMOND REFINERY | | 400 | CEQA INFO FORM PAGES 1 THRU 26 (SIGNED).PDF | X |
| [VIEW] | RENEWAL - WITH CHANGES | FINAL PERMIT | PERMIT RENEWAL 1 | 09/06/2006 | 480 | FACILITY SIZE CHANGE REQUEST.PDF | X |

**MAINTENANCE - FINAL DOCUMENTS**

| TYPE | DOCUMENT TITLE | DOCUMENT TYPE | SIZE | COMPLETION DATE |
|---|---|---|---|---|
| *REGULATORY ACTION* | DISCOVERY OF A NEW SWMU_150708 | LETTER FROM FACILITY | 16433 KB | 8/13/2015 |

**DOCUMENT STORAGE (INTERNAL)** UPLOAD DOC

NO DOCUMENTS IN STORAGE

CONTACT PERMITTING HELP

**To:** Nieto, Edward@DTSC[Edward.Nieto@dtsc.ca.gov]
**From:** Zabaneh, Mahfouz
**Sent:** Fri 4/7/2017 3:53:57 PM
**Subject:** RE: Torrance refinery

Hi Ed,

Thank you for your help yesterday with Torrance refinery and for the quick email responses with the information.

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Nieto, Edward@DTSC [mailto:Edward.Nieto@dtsc.ca.gov]
**Sent:** Thursday, April 06, 2017 8:33 AM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Subject:** Torrance refinery

Mike,

I looked at our Enforcement Envirstor and came accrosst hese 4 documents based on a recent

complaint. Can't tell if these are public documents. More info that is public can be found at http://www.envirostor.dtsc.ca.gov/public/eerp_profile_report.asp?global_id=3000737

Ed

**To:** Sommer, Tab[Sommer.Tab@epa.gov]
**Cc:** Gross, Barbara[Gross.Barbara@epa.gov]; Armann, Steve[Armann.Steve@epa.gov]; Scheuermann, Karen[Scheuermann.Karen@epa.gov]
**From:** Zabaneh, Mahfouz
**Sent:** Thur 4/6/2017 5:13:43 PM
**Subject:** RE: Torrance Refinery

Hi Tab,

The revisions you made to the paragraph shown below, based on our discussion earlier, look fine to me.

Thanks,


Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)


**From:** Sommer, Tab
**Sent:** Thursday, April 06, 2017 9:52 AM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Subject:** RE: Torrance Refinery

**Currently, there are no Federally regulated RCRA units at the Torrance Refinery site located at 3700 W. 190TH St. Torrance, CA. The site was previously granted interim status for six units, but now the units are delisted (also as protective filer) according to RCRAInfo (assuming the facility has used both IDs below).**

**Note: The refinery named ""MOBIL OIL, TORRANCE REFINERY" as stated in the document has a California ID of 71002204, but it does not have a EPA ID. Another site "TORRANCE REFINING COMPANY LLC" is listed at the same address with a an EPA ID CAD008354052. This second one does not have RCRA regulated units (coded as delisted and protective filer and not linked to the facility in standard RCRAInfo reports).**

**From:** Sommer, Tab
**Sent:** Thursday, April 06, 2017 9:58 AM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Cc:** Kohler, Amanda <Kohler.Amanda@epa.gov>; Gross, Barbara <Gross.Barbara@epa.gov>
**Subject:** FW: Torrance Refinery

Mike

My Branch Chief want me to provide a short answer to my Office Director as to whether any TSD units were involved/impacted at Torrance

Can you let me know if this an accurate statement? (or should I be asking someone else?)

**There are no Federally regulated RCRA units at the Torrance Refinery site located at 3700 W. 190TH St. Torrance, CA.**

**The refinery named ""MOBIL OIL, TORRANCE REFINERY" as stated in the document has a California ID of 71002204, but it does not have a EPA ID. Another site "TORRANCE REFINING COMPANY LLC" is listed at the same address with a an EPA ID CAD008354052. This second one does not have RCRA regulated units (coded as delisted and protective filer and not linked to the facility in standard RCRAInfo reports).**

Note – I think this specific site has a different ID than I looked up yesterday.

The name in the summary document said "MOBIL OIL, TORRANCE REFINERY" this has a CA ID of 71002204 based on an EnviroStor search, it does not have an EPA ID, just a CA ID, but at the same address, there is the TORRANCE REFINING COMPANY LLC with the EPA ID of CAD008354052 that I looked up yesterday.

Even though it is under program type of "interim status permit" I assume this is not a federal RCRA permit.

All three entries in Envirostor are at the same address: 3700 W. 190TH STREET TORRANCE 90503

| SITE / FACILITY NAME | ESTOR / EPA ID | PROGRAM TYPE | STATUS | ADDRESS DESCRIPTION | C |
|---|---|---|---|---|---|
| TORRANCE REFINING COMPANY LLC | CAD008354052 | HAZ WASTE - RCRA Interim Status Permit | PROTECTIVE FILER | 3700 W 190TH ST | T |
| TORRANCE REFINING COMPANY LLC | CAD008354052 | INSPECTION | NO ACTION | 3700 W 190TH ST | T |
| MOBIL OIL, TORRANCE REFINERY | 71002204 | TIERED PERMIT | REFER: OTHER AGENCY | 3700 W. 190TH STREET | T |

## MOBIL OIL, TORRANCE REFINERY (71002204)

3700 W. 190TH STREET
TORRANCE, CA 90503
LOS ANGELES COUNTY
**SITE TYPE:** TIERED PERMIT

**OFFICE:**

Summary | Map | Related Sites

### Site Information

**CLEANUP STATUS**
REFER: OTHER AGENCY AS OF

**SITE TYPE:** TIERED PERMIT
**NATIONAL PRIORITIES LIST:** NO
**ACRES:** NONE SPECIFIED
**APN:** NONE SPECIFIED
**CLEANUP OVERSIGHT AGENCIES:**
NONE SPECIFIED

**ENVIROSTOR ID:**
**SITE CODE:**
**SPECIAL PROGRAM:**
**FUNDING:**
**ASSEMBLY DISTRICT:**
**SENATE DISTRICT:**

### Regulatory Profile

**PAST USE(S) THAT CAUSED CONTAMINATION**
NONE SPECIFIED

**POTENTIAL CONTAMINANTS OF CONCERN**
NONE SPECIFIED

**POTENTIAL MEDIA AFFECTED**
NONE SPECIFIED

### Site History

**From:** Sommer, Tab
**Sent:** Thursday, April 06, 2017 7:53 AM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Subject:** FW: Torrance Refinery

FYI – from my Office Director, see attachment on Torrence

Yes it looks like it was the 2015 and 2016 incidents that they were referring to.

**From:** Johnson, Barnes
**Sent:** Wednesday, April 05, 2017 5:18 PM

**To:** Sasseville, Sonya <Sasseville.Sonya@epa.gov>; Guernica, Mimi <Guernica.Mimi@epa.gov>; Kohler, Amanda <Kohler.Amanda@epa.gov>; Sommer, Tab <Sommer.Tab@epa.gov>
**Cc:** ORCR IO <ORCR_IO@epa.gov>; Scott, Jeff <Scott.Jeff@epa.gov>; Elliott, Ross <Elliott.Ross@epa.gov>
**Subject:** FW: Torrance Refinery

Here is more detail on the refinery incident that we discussed in Senior Staff earlier this week. Please note the RCRA inspection that is mentioned. It would be good to make sure we are up on the RCRA status of this facility and learn about whether any of the incidents have any relationship to the facilities waste management footprint.


**Barnes Johnson**

USEPA | Resource Conservation and Recovery | Tel 703-308-8895 | johnson.barnes@epa.gov | @EPAland


**From:** Breen, Barry
**Sent:** Wednesday, April 05, 2017 5:08 PM
**To:** Cheatham, Reggie <cheatham.reggie@epa.gov>; Clark, Becki <Clark.Becki@epa.gov>; Johnson, Barnes <Johnson.Barnes@epa.gov>; Salyer, Kathleen <Salyer.Kathleen@epa.gov>
**Cc:** Hilosky, Nick <Hilosky.Nick@epa.gov>; Brooks, Becky <Brooks.Becky@epa.gov>; Simon, Nigel <Simon.Nigel@epa.gov>
**Subject:** FW: Torrance Refinery

**From:** Quast, Sylvia
**Sent:** Wednesday, April 05, 2017 2:41 PM
**To:** Breen, Barry <Breen.Barry@epa.gov>; Dunham, Sarah <Dunham.Sarah@epa.gov>
**Cc:** Strauss, Alexis <Strauss.Alexis@epa.gov>; Jordan, Deborah <Jordan.Deborah@epa.gov>

**Subject:** FW: Torrance Refinery

Hi Barry and Sarah – Attached please find a short briefing paper requested by the Administrator on the Torrance, California refinery. I had just finished coordinating internally on this when we got the request below to send it on, so I apologize for not being able to loop you in first. Please do not hesitate to let me know if you have any concerns or questions about the paper. Thanks, Sylvia

**From:** Quast, Sylvia
**Sent:** Wednesday, April 05, 2017 11:33 AM
**To:** Strauss, Alexis <Strauss.Alexis@epa.gov>
**Cc:** Knapp, Kristien <Knapp.Kristien@epa.gov>; Miller, Amy <Miller.Amy@epa.gov>
**Subject:** RE: Torrance Refinery

Here you go. Please don't hesitate to let me know if you need anything else.

**From:** Strauss, Alexis
**Sent:** Wednesday, April 05, 2017 11:31 AM
**To:** Quast, Sylvia <Quast.Sylvia@epa.gov>
**Cc:** Knapp, Kristien <Knapp.Kristien@epa.gov>; Miller, Amy <Miller.Amy@epa.gov>
**Subject:** Re: Torrance Refinery

No please send

Sent from my iPhone

On Apr 5, 2017, at 2:05 PM, Quast, Sylvia <Quast.Sylvia@epa.gov> wrote:

Am just tracking down a few last facts and should have it to you shortly.

**From:** Strauss, Alexis
**Sent:** Wednesday, April 05, 2017 10:46 AM
**To:** Knapp, Kristien <Knapp.Kristien@epa.gov>
**Cc:** Miller, Amy <Miller.Amy@epa.gov>; Quast, Sylvia <Quast.Sylvia@epa.gov>

**Subject:** Re: Torrance Refinery

Please send final to me and Kristien, thx
Sent from my iPhone

On Apr 5, 2017, at 1:10 PM, Knapp, Kristien <Knapp.Kristien@epa.gov> wrote:

> Just checking on this – did you send forward already? Can you send me and Byron a copy?
>
> **From:** Strauss, Alexis
> **Sent:** Wednesday, April 05, 2017 11:08 AM
> **To:** Knapp, Kristien <Knapp.Kristien@epa.gov>
> **Cc:** Jordan, Deborah <Jordan.Deborah@epa.gov>; Flynn, Mike <Flynn.Mike@epa.gov>; Grantham, Nancy <Grantham.Nancy@epa.gov>
> **Subject:** Re: Torrance Refinery
>
> I'm reviewing it now, will be ready in five minutes.
>
> Sent from my iPhone
>
> On Apr 5, 2017, at 11:05 AM, Knapp, Kristien <Knapp.Kristien@epa.gov> wrote:
>
> > Hi Alexis and Debbie – The Administrator is looking for additional information (in the form of a 1-pager) about the Torrance Refinery and EPA options. It seems like Region 9 should take the lead, with some coordination from OLEM and OAR. Does that sound like a good path forward to get him something?
> >
> > Thanks,
> >
> > Kristien
> >
> > **From:** Brown, Byron
> > **Sent:** Wednesday, April 05, 2017 7:51 AM
> > **To:** Knapp, Kristien <Knapp.Kristien@epa.gov>; Lewis, Josh <Lewis.Josh@epa.gov>

**Subject:** Torrance Refinery

Region 9 discussed issues involving the Torrance Refinery in California in the weekly report, and the Administrator would like additional information about recent activities there and EPA's options. Can you work on a background paper on this issue? Thanks.

Byron R. Brown

Deputy Chief of Staff for Policy

Office of the Administrator

U.S. Environmental Protection Agency

**To:** Eshaghian, Mike@DTSC[Mike.Eshaghian@dtsc.ca.gov]
**Cc:** Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]
**From:** Zabaneh, Mahfouz
**Sent:** Wed 8/24/2016 4:14:26 PM
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mike,

Barbara Gross, my Supervisor, will be calling you concerning the review of Phillips 66.

Thanks,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Eshaghian, Mike@DTSC [mailto:Mike.Eshaghian@dtsc.ca.gov]
**Sent:** Tuesday, August 23, 2016 3:45 PM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Cc:** Phil.Blum_dtsc.ca.gov <Phil.Blum@dtsc.ca.gov>
**Subject:** FW: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mike,

We are going to public notice the attached Draft Post Closure Permit for Phillips 66 San Francisco Refinery Land Treatment Area on August 29, 2016. The comment period will end on October 14, 2016. I did not receive any comments from EPA. Please let me know ASAP if you have any concerns or comments. Thanks.

**From:** Eshaghian, Mike@DTSC
**Sent:** Tuesday, July 12, 2016 7:31 AM
**To:** Zabaneh, Mahfouz
**Cc:** Blum, Phil@DTSC; Gross, Barbara; Rajagopalan, Latha
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

I am planning to public notice it sometimes in early August. How much time do you need?

**From:** Zabaneh, Mahfouz [mailto:Zabaneh.Mahfouz@epa.gov]
**Sent:** Monday, July 11, 2016 4:28 PM
**To:** Eshaghian, Mike@DTSC
**Cc:** Blum, Phil@DTSC; Gross, Barbara; Rajagopalan, Latha
**Subject:** RE: Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mike,

I will pass this permit to my Supervisor, Barbara Gross, and she will assign it to someone to review when she gets back in the office, since I am working on a project with a tight schedule and I won't have time to review it. Barbara is on vacation till 7/18.

How long does EPA have to review this draft post closure permit?

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Eshaghian, Mike@DTSC [mailto:Mike.Eshaghian@dtsc.ca.gov]
**Sent:** Monday, July 11, 2016 3:32 PM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Cc:** Eshaghian, Mike@DTSC <Mike.Eshaghian@dtsc.ca.gov>; Phil.Blum_dtsc.ca.gov <Phil.Blum@dtsc.ca.gov>
**Subject:** Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area

Hi Mr. Zabaneh,

I hope all is well. It has been a while since we have been in touch. I have attached a copy of the Phillips 66 Company San Francisco Refinery Draft Post Closure Permit for Land Treatment Area. I understand that EPA also review our permits. Please let me know if you have any questions or comments. Thanks.

**To:** Steen, Karen@DTSC[Karen.Steen@dtsc.ca.gov]
**Cc:** Gross, Barbara[Gross.Barbara@epa.gov]
**From:** Zabaneh, Mahfouz
**Sent:** Tue 8/23/2016 3:51:42 PM
**Subject:** RE: DTSC grant - decisions and commitments
CA 2016 & 2017 Goals updated 29Jul2016.doc
RCRA2014_2015_EOY(DTSC Submittal).pdf
RCRA Supplemental Report 10302015.pdf
Attachment 1 - CA 2015 Accomplishments and 2016 Goals updated 16Nov2015.doc

Hi Karen,

I wanted to correct what I said on the phone. The current DTSC Grant is for the State Fiscal Years 2015, 2016, and 2017 which will end June 30, 2017. The correction is that State FY14 in not in this grant cycle. It was in the previous one.

Attached are the accomplishments for the State FY15 and FY16 they are in word format.

The rows in bolded lettering are the ones that met the goal.

The ones that say: "Transfer to Corrective Action" are the data cleanups. All the others are permit renewals.

The pdf files are your end of year reports to us for the State FY15. The State FY16 report has not been sent to us yet.

Please feel free to call me if you have any questions.

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**From:** Steen, Karen@DTSC [mailto:Karen.Steen@dtsc.ca.gov]
**Sent:** Friday, August 19, 2016 1:24 PM
**To:** Zabaneh, Mahfouz <Zabaneh.Mahfouz@epa.gov>
**Subject:** DTSC grant - decisions and commitments

Hi Mike,

I just left you a phone message and wanted to follow up with an email. I work in Lori Koch's unit in Berkeley and am collecting numbers on DTSC's RCRA grant, mainly how we count permit decisions and data cleanup items. I'd appreciate a call when you have a few minutes.

Thank you! I look forward to talking to you,

**Karen Steen**

Hazardous Substances Engineer

Department of Toxic Substances Control

Permitting Division

(510) 540-3812

# FY15 Permitting Accomplishments

Updated November 16, 2015

| | Facility Name | EPA ID # | Projected Date | Notes |
|---|---|---|---|---|
| 1 | **VEOLIA ES TECHNICAL SOLUTIONS LLC – Richmond –** Need to confirm in RCRAInfo after the upload on Jul 15 | **CAT080014079** | **Effective Date 10/7/2014** | **Issue date 9/8/2014. Effective Date 10/7/2014** |
| 2 | **US NAVY NAVAL AIR STATION - NORTH ISLAND (NASNI) – New Name for the facility is Naval Base Coronado** | **CAR000019430** | **Effective Date 2/3/15** | |
| 3 | **ACME LANDFILL** | **CAD041835695** | **Effective 6/26/2015** | New PC Permit |
| 4 | **Georgia Pacific Corp** | **CAD009380890** | **9/4/2015** | **Transfer to CA** |
| 5 | **J.R. Simplot Company** | **CAD98081400** | **9/4/2015** | **Transfer to CA** |
| 6 | **Martin Metal Finishing Inc** | **CAD059794974** | **9/14/2015** | **Transfer to CA** |
| 7 | **MSE Technologies LLC** | **CAD062062435** | **9/15/2014** | **Transfer to CA** |
| 8 | **The Marquardt Company** | **CAD044696102** | **9/14/2015** | **Transfer to CA** |
| 9 | **Aerojet Ordinance Chino Facility** | **CAD981457302** | **9/14/2015** | **Transfer to CA** |
| 10 | **Chem Technology Labs** | **CAD008275885** | **9/14/2015** | **Transfer to CA** |

**BOLD** – Met the goal



ED_001593_00026303

# California FY16 Permitting Goals

| | | | | |
|---|---|---|---|---|
| **1** | **TESORO (BP) CARSON REFINERY** | **CAD077227049** | **Effective Date 11/16/2015** | **Issued on 10/15/2015** |
| 2 | GE International | CAD030584502 | 12/2015 | |
| 3 | Philips 66, San Francisco Refinery | CAD009108705 | 12/2015 | Post Closure Renewal |
| 4 | LAWRENCE LIVERMORE NATIONAL LABORATORY (Main Site) | CA2890012584 | 1/2016 | Renewal. Was public noticed which ends 3Aug15. |
| 5 | JOHN SMITH ROAD LANDFILL | CAD990665432 | 2/2016 | Post Closure Permit. Enforcement Issues |
| 6 | FORWARD LANDFILL | CAD990794133 | 2/2016 | |
| 7 | EVOQUA WATER TECHNOLOGIES CORP | CAD097030993 | 3/2016 | Renewal |
| 8 | SAFETY KLEEN, EL MONTE | CAT000613893 | 3/2016 | CLEAN CLOSURE |
| 9 | DEMENNO KERDOON | CAT080013352 | 3/2016 | Permit expired 7/6/2011. Call In completed 3/16/2010. |
| 10 | San Onofre (SONGS) Southern CA Edison | CAD000630921 | 3/2016 | Mixed waste facility |
| 11 | US NAVY CHINA LAKE | CA2170023152 | 4/2016 | Permit expired 6/30/2011. Part B received 1/21/2011. |
| 12 | CLEAN HARBORS WESTMORLAND | CAD000633164 | 4/2016 | Renewal |
| 13 | PANOCHE | CAD000060012 | 4/2016 | |
| 14 | Chevron, Richmond Refinery | CAD009114919 | 5/2016 | Post closure permit |
| 15 | RIVERBANK ARMY AMMO | CA7210020759 | 5/2016 | Closure |
| 16 | LAWRENCE LIVERMORE NATIONAL LABORATORY - SITE 300 (Tracy) | CA2890090002 | 6/2016 | Renewal |
| 17 | PHIBRO TECH INC | CAD008488025 | 6/2016 | Working on NOD |
| 18 | Safety Kleen of California, Nework | CAD980887418 | 6/2016 | |
| 19 | (IT) VINE HILL COMPLEX | CAD982521460 | 6/2016 | |

**BOLD** – Met the goal

| | | | | |
|---|---|---|---|---|
| 20 | Dow | | 9/2016 | |
| 21 | SANDIA NATIONAL LAB CA | CA2890012923 | 3/2017 | |
| 22 | KW Plastics | | | |
| 23 | Kearney KPR | | | |
| 24 | Henkel Corporation | CAD009152364 | | Transfer to CA |
| 25 | Mandalay Generating Station | CAD000630913 | | Transfer to CA |

# California FY16 Permitting Goals

Updated July 29, 2016 based on the discussions in the July 28 Meeting

| | | | | |
|---|---|---|---|---|
| **1** | **TESORO (BP) CARSON REFINERY** | **CAD077227049** | **Effective Date 11/16/2015** | **Issued on 10/15/2015** |
| **2** | **SAN ONOFRE (SONGS) SOUTHERN CA EDISON** | **CAD000630921** | **4/20/2016** | **OP Permit Renewal** |
| **3** | **KW PLASTICS** | **CAD982435026** | **4/7/2016** | **Unit Closure** |
| **4** | **LAWRENCE LIVERMORE NATIONAL LABORATORY (Main Site)** | **CA2890012584** | **4/18/2016** | **OP Permit Renewal** |
| **5** | **TFX AVIATION INC.** | **CAD008383127** | **6/23/2016** | **Post Closure Permit** |
| **6** | **GE INTERNATIONAL** | **CAD030584502** | **6/22/2016** | **OP Permit Renewal** |
| **7** | **Solar Turbine – NOT IN RCRAINFO YET** | **CAD008314908** | **5/6/2016** | **Post Closure** |
| **8** | **FORWARD LANDFILL– NOT IN RCRAINFO YET** | **CAD990794133** | **7/18/2016** | **Post Closure Permit** |
| **9** | **KAISER VENTURES– NOT IN RCRAINFO YET** | **CAD008274938** | **6/2016** | **Post Closure Permit** |
| 10 | LAWRENCE LIVERMORE NATIONAL LABORATORY - SITE 300 (Tracy) | CA2890090002 | 9/2016 | Renewal |
| 11 | KW PLASTICS | CAD982435026 | 9/2016 | Operating Permit |
| 12 | RIVERBANK ARMY AMMO | CA7210020759 | 9/2016 | Closure |
| 13 | (IT) VINE HILL COMPLEX | CAD982521460 | 10/2016 | Transfer to CA |
| 14 | Montezuma | CAD079089512 | 10/2016 | Transfer to CA |
| 15 | Benson Ridge | CAD000633289 | 10/2016 | Transfer to CA |
| 16 | DEMENNO KERDOON | CAT080013352 | 3/2017 | OP Permit Renewal. |
| 17 | JOHN SMITH ROAD LANDFILL | CAD990665432 | 11/2016 | Post Closure Permit. |
| 18 | CHEVRON, RICHMOND REFINERY | CAD009114919 | 12/2016 | Post closure permit |
| 19 | EVOQUA WATER TECHNOLOGIES CORP | CAD097030993 | 1/2017 | Renewal |
| 20 | LAWRENCE LIVERMORE NATIONAL LABORATORY - SITE 300 (Tracy) | CA2890090002 | 1/2017 | Post Closure Permit |
| 21 | CHEMTRADE | CAD009142290 | 10/2016 | Closure |

**BOLD** – Met the goal

| | | | | |
|---|---|---|---|---|
| 22 | SAFETY KLEEN OF CALIFORNIA, NEWORK | CAD980887418 | 7/2017 | OP Permit Renewal |
| 23 | DOW CHEMICAL | CAD076528678 | 3/2017 | OP Permit Renewal |
| 24 | KEARNEY KPF | CAD981429715 | 2/2017 | Post Closure Permit |
| 25 | PANOCHE-Transferring to Superfund or CA | CAD000060012 | 10/2016 | -Transfer to CA |
| 26 | BOING CO. – CANOGA PARK | CAD093365435 | 6/2017 | Post Closure Permit |
| 27 | PHIBRO TECH INC | CAD008488025 | 5/2017 | OP Permit Renewal |
| 28 | US NAVY CHINA LAKE | CA2170023152 | 1/2017 | OP Permit Renewal |
| 29 | CLEAN HARBORS WESTMORLAND | CAD000633164 | 1/2017 | OP Permit Renewal |
| 30 | SAFETY KLEEN, EL MONTE | CAT000613893 | 3/2017 | CLEAN CLOSURE |
| 31 | Phillips 66, SF Refinery | CAD009108705 | 11/2016 | PC Renewal |

Department of Toxic Substances Control

*Matthew Rodriquez*
Secretary for
Environmental Protection

Barbara A. Lee, Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806

*Edmund G. Brown Jr.*
Governor

October 30, 2015

Ms. Kelly Gorini
Project Officer
Planning and State Development Office
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street, LND-1-1
San Francisco, California 94105

**SUPPLEMENTAL REPORT TO THE 2014-2015 END OF YEAR REPORT FOR THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) GRANT**

Dear Ms. Gorini,

The Department of Toxic Substances Control (DTSC) is submitting a supplemental report to amend DTSC's 2014-2015 RCRA Grant End-of-Year Report. The enclosed report provides an update of DTSC's commitments completed during the period July 1 through September 30, 2015, and an expanded 2014-2015 program assessment.

If you or your staff have any questions, please contact me at (916) 322-2505 or Donn.Diebert@dtsc.ca.gov.

Sincerely,

Donn Diebert, P.E., Chief
Program Implementation Unit
Policy and Program Support Division

Enclosures

cc: See next page.

Printed on Recycled Paper

cc: Ms. Cheryl Nelson, Manager
Planning and State Development Office, LND-1-1
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

Ms. Susan Chiu
Grant Specialist
Grants Management Section, MTS-7
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, California 94105

# CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL
# RESOURCE CONSERVATION AND RECOVERY ACT GRANT

## Supplement to the 2014-2015 End-Of-Year Report
## Reporting Period: July 1, 2014 - September 30, 2015

## INTRODUCTION

The Department of Toxic Substances Control (DTSC) reported on progress toward meeting Resource Conservation and Recovery Act (RCRA) Grant commitments in the 2014-2015 End-of-Year Report, submitted to the US Environmental Protection Agency Region 9 (US EPA) on August 27, 2015. The program self-assessments in the report included information on DTSC's commitments that were not completed before the end of the reporting period, June 30, 2015. The purpose of this supplemental report is to provide updated information on DTSC's completion of goals and to provide further explanation for the commitments that DTSC did not meet during the reporting period.

## ENFORCEMENT

### Inspections and Monitoring

DTSC accomplished the majority of the inspections and financial assurance reviews listed in their annual work plan (RCRA Grant Inspection List) for the reporting period. However, 8 of the planned inspections and 19 of the financial assurance reviews were not completed by the end of the reporting period and DTSC committed to complete them by September 30, 2015.

#### Inspection Commitment Update

Of the eight inspections that were not completed as planned for state fiscal year 2014-2015 (FY 14-15), seven were inspected between July 1 and September 30, 2015, and one was removed from the list due to an error in reporting. The inspection details are shown in the following table.

#### Financial Assurance Review Commitment Update

Of the 19 financial responsibility reviews that were not completed by the end of FY 14-15, 16 were completed by September 30, 2015.

The number of RCRA Grant inspections conducted after June 30, 2015 and the total inspections completed through September 30, 2015 are shown in the table below.

| | RCRA FUNDED INSPECTIONS PLANNED AND CONDUCTED JULY 1 2014-SEPTEMBER 30, 2015 | | | | | | |
|---|---|---|---|---|---|---|---|
| **Inspection Type** | **Total Planned** | **Conducted 7/1/2014 - 6/30/2015** | **Class I Violations Observed 7/1/2014 - 6/30/2015** | **Inspections Conducted 7/1/2015 - 9/30/2015** | **Class I Violations Observed 7/1/2015 - 9/30/2015** | **Total Inspections Conducted 7/1/2014- 9/30/2015** | **Total Class I Violations Observed 7/1/2014- 9/30/2015** |
| Treatment, Storage, and Disposal (TSD) Compliance Evaluation Inspections (CEI) | **37** | 40 | 7 | 4 | 1 | 44 | 8 |
| Focused Compliance Inspections (FCI) – TSD TSD Hazardous Waste Management Unit Inspections | - | 8 | 1 | 1 | - | 9 | 1 |
| Post-closure (PC) Facility Inspections (CEI) | **7** | 10 | 1 | 1 | - | 11 | 1 |
| FCI - Groundwater Audit Report Inspection for TSD and Post-closure | - | 9 | - | - | - | 9 | - |
| Groundwater Monitoring Evaluation | - | 1 | - | - | - | 1 | - |
| Generator Inspections (FCI-BIF) | **2** | 1 | - | - | - | 1 | - |
| Standardized Permits | - | 1 | - | - | - | 1 | - |
| Transporter Inspections | **5** | 24 | 14 | 1 | - | 25 | 14 |
| Facility Self Disclosures | - | - | - | - | - | - | - |
| Other Inspections – Follow-Up | - | 1 | - | - | - | 1 | - |
| **Totals** | | **95** | **23** | **7** | **1** | **102** | **24** |

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## PERMITTING

### GPRA Permit and Permit Renewal Goals

DTSC's 2014-2015 End of Year Report provided a summary of California's GPRA achievements in the Permitting Program Self-Assessment Report. The following expands on the self-assessment in that report and provides additional information regarding process enhancements in the Permitting Division designed to achieve long-term improvements.

Each year, US EPA sets specific goals for the Grant and GPRA that DTSC is committed to meet. For FY 2014-2015, Permitting and US EPA agreed to a goal of eight Permit/Permit Renewal/Post-Closure/Closure Verifications. DTSC met four of the eight Verifications as outlined below:

| Company Name | US EPA ID Number | Type of Commitment | Date Completed |
|---|---|---|---|
| VEOLIA ES TECHNICAL SOLUTIONS LLC RICHMOND | CAT080014079 | Renewal | 10/7/2014 |
| NAVAL BASE CORONADO MIXED WASTE STORAGE FACILITY | CAR000019430 | Renewal | 2/2/2015 |
| CROSBY & OVERTON | CAD028409019 | Renewal | 8/22/2014 |
| ACME LANDFILL | CAD041835695 | Post-Closure Permit | 5/27/2015 |

Since the year 2000, DTSC has consistently met the multi-year GPRA goals set by US EPA. This achievement is significant as California has oversight over one of the largest universes of hazardous waste facilities in the nation. Although DTSC did not meet the annual GPRA goal set for FY 14-15, DTSC is committed to meet the multi-year goals outlined in the Multi-Year Strategy.

DTSC did not meet the annual goals due to the unexpected loss of resource allocations available to process permit applications. DTSC redirected significant staff resources to one project, the Exide Technologies facility, to ensure protection of human health and the environment in the communities around the facility. The Exide Technologies facility in Vernon has required Permitting staff and support staff to suspend ongoing annual GPRA goal commitment work in order to ensure those protections. As a result, the target commitment dates could not be met for the suspended GPRA work. DTSC Permitting staff and support staff expended more than 19,000 hours on the Exide project in FY 14-15. However, DTSC anticipates returning allocated resources back to GPRA goal commitment work quickly as additional positions acquired for the Exide work are established.

**Multi-Year Strategy**

The Multi-Year Strategy Work Plan submitted to US EPA in March 2013 shows targeted facilities for GPRA goals for three years (from 2015 to 2018) of the RCRA Grant cycle. It tracks and projects all facilities and sites for which DTSC has been delegated RCRA authority, including new permits, permit backlogs, permit renewals, post-closure permits, closures, and corrective action. Revisions to the Multi-Year Strategy Work Plan are provided in March of each year. The current version of the Multi-Year Strategy Work Plan was attached to the DTSC 2014-2015 End of Year Report.

**Program Improvements**

To improve performance in meeting the Multi-Year Strategy Work Plan goals, the Permitting Division has created a Performance Management Approach. One of the elements essential to the implementation of this Performance Management Approach was the development of an Annual Work Plan for FY 15-16. The Annual Work Plan identifies schedules for facility specific major milestones that the Permitting Division has committed to completing during the fiscal year. These commitments are the result of the project schedules that permitting project managers uploaded to EnviroStor for their projects.

In addition to the Annual Work Plan, each Permitting Unit Supervisor has prepared an Operation Plan that includes better monitoring and tracking of progress in meeting the scheduled commitments. At the end of the fiscal year, the Permitting Division will compare the number of completed milestones with the number of planned commitments for the same milestone in the Annual Work Plan. This comparison is one of the factors that the Permitting Division will use to evaluate its overall performance for the fiscal year.

**Permitting Enhancement Work Plan**

To improve the Permitting Program, the Permitting Division created a Permitting Enhancement Work Plan. A number of critical permitting enhancements were completed and implemented in 2015 to achieve long-term improvements in the permitting process. These enhancements include:

1) Establishing clear processes and procedures for coordination between DTSC internal programs and shared services.

2) Multiple technical training sessions on permitting, including permit modifications, tank assessments, and landfill design.

3) Development of new procedures for quality control reviews by supervisors, peers, and others.

4) Lean Six Sigma study of the Notice of Deficiency (NOD) process, and development of preliminary guidance for interfacing with the applicant to reduce

and clarify NODs.

5) Workshop to update the baseline permitting process flowchart to an improved process.

6) Formation of the Permitting Advisory and Resolution Committee (PARC), to resolve technical and regulatory issues that are otherwise an impediment to permitting progress.

The senior permit writers and other key staff have supported these efforts to improve the permitting program within DTSC. Other actions included use of a new Access database checklist tool to evaluate applications and track progress through the Technical Review process, updates to the Permit Writer's Manual, development of potential enhancements to the public outreach process, development and initial use of new procedures for determining when a facility should be denied a permit on the basis of compliance history and/or Notices of Deficiency.

# Department of Toxic Substances Control

***Matthew Rodriquez***
Secretary for
Environmental Protection

Barbara A. Lee, Director
1001 "I" Street
P.O. Box 806
Sacramento, California 95812-0806

***Edmund G. Brown Jr.***
Governor


August 27, 2015

Ms. Kelly Gorini
Project Officer
Planning and State Development Office
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street, LND-1-1
San Francisco, California 94105

**FISCAL YEAR 2014-2015 END OF YEAR REPORT FOR THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) GRANT**

Dear Ms. Gorini,

The Department of Toxic Substances Control is submitting the original End of Year Report for the RCRA Grant along with one copy. As a grant requirement, this report summarizes activities for the 2014-2015 fiscal year (July 1, 2014 through June 30, 2015).

If you or your staff have any questions, please contact me at (916) 322-2505 or Donn.Diebert@dtsc.ca.gov.

Sincerely,

Pauline Bates

for Donn Diebert, P.E., Chief
Program Implementation Unit
Policy and Program Support Division

Enclosures

cc: See next page.

Printed on Recycled Paper

cc: Ms. Cheryl Nelson, Manager
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# CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL

# RESOURCE CONSERVATION AND RECOVERY ACT GRANT

# END-OF-YEAR REPORT

## State Fiscal Year 2014-2015

## July 1, 2014 Through June 30, 2015

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**Multi-Year Strategy**




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## INTRODUCTION

This report describes the California Department of Toxic Substances Control's (DTSC) accomplishments during state fiscal year (FY) 2014-2015; and shows DTSC's progress toward meeting the goals and objectives in the Resource Conservation and Recovery Act (RCRA) C Grant Work Plan. The activities conducted are consistent with DTSC's mission, and advance the DTSC's and the United States Environmental Protection Agency's (US EPA's) strategic goals.



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# PROGRAM SELF-ASSESSMENT REPORTS

## I. ENFORCEMENT

DTSC's Enforcement and Emergency Response Division (EERD) performed the following activities, except where noted, between July 1, 2014 and June 30, 2015. The activities included in this End of Year Report were RCRA grant-funded and state-funded. Data from DTSC's databases provided the principal basis for reporting these activities.

### Enforcement Activities

The following are enforcement highlights during the reporting period:

- Completed 95 RCRA funded inspections, 126 non-RCRA funded inspections, and 25 Used Oil Appropriation and Used Oil Contract funded inspections.
- Completed 65 Financial Assurance (FA) reviews (34 RCRA funded, 27 non-RCRA funded, and 4 Used Oil).
- Reimbursed/Released $28,009,720.47 from FA mechanisms.
- Completed 117 non-RCRA funded electronic waste (e-waste) inspections.
- Assessed $2,706,463 in settled cases resulting from administrative/civil enforcement actions, in which $2,331,883 was from RCRA funded cases and $374,580 was from non-RCRA funded cases.
- Initiated 50 administrative/civil enforcement cases; settled 29 administrative/civil enforcement cases (16 from RCRA funded inspections and 13 from non-RCRA funded inspections).
- Received 584 formal complaints; referred 492 complaints to Certified Unified Program Agencies (CUPAs) and other agencies; and took action on 109 complaints. Total number of complaint actions processed was 601, which includes complaints from prior fiscal years.
- Conducted 28 CUPA evaluations; and 48 CUPA oversight inspections.
- Received 16 ninety-day accumulation extension requests; 15 were approved, one was denied.
- Received 3 self-disclosure notifications, inspected 2 self-disclosure notifications (includes previous years' self-disclosures), and closed/settled 4 Self-Disclosure investigations.
- At the U.S./Mexico border, a total of 3891 trucks were inspected. DTSC inspected 2376 trucks (2316 Northbound and 60 Southbound). Six violations were discovered for RCRA and non-RCRA hazardous waste. San Diego County conducted additional inspections, under contract with DTSC; a total of 1515 trucks (1507 Northbound and 8 Southbound). One violation was discovered for RCRA and non-RCRA hazardous waste.
- Received 15 import notifications and 30 export notifications.



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# PROGRAM SELF-ASSESSMENT REPORTS

## A. INSPECTION AND MONITORING

### 1. Inspections

The following 95 RCRA funded inspections were conducted:

| RCRA FUNDED INSPECTIONS PLANNED AND CONDUCTED FY 2014/2015 | | | |
|---|---|---|---|
| **Inspection Type** | **Total Planned *** | **Total Conducted** | **Class I Violation Observed** |
| Treatment, Storage, and Disposal (TSD) Compliance Evaluation Inspections (CEI) | **37** | 39 | 6 |
| Focused Compliance Inspections (FCI) – TSD TSD Hazardous Waste Management Unit Inspections | **-** | 4 | 1 |
| Post-closure (PC) Facility Inspections (CEI) | **7** | 15 | 2 |
| FCI - Groundwater Audit Report Inspection for TSD and Post-closure | **-** | 9 | 0 |
| Groundwater Monitoring Evaluation | **-** | 1 | 0 |
| Generator Inspections (FCI-BIF) | **2** | 1 | 0 |
| Standardized Permits | - | 1 | 0 |
| Transporter Inspections | **5** | 24 | 14 |
| Facility Self Disclosures | **-** | 0 | 0 |
| Other Inspections – Follow-Up | **-** | 1 | 0 |
| **Totals** | | **95** | **23** |

* Note: "Total Planned" for FY 2014/2015 for TSD, PC, and generator inspections, from the RCRA Grant Inspection List for the reporting period.

**Missed RCRA Grant Commitments:**

Seven TSD and one PC facility were not inspected as planned for FY 2014-2015 and will be inspected by September 30, 2015.
The following 126 non-RCRA funded inspections were conducted:

| NON-RCRA FUNDED INSPECTIONS CONDUCTED FY 2014-2015 | | |
|---|---|---|
| **Inspection Type** | **Total Conducted** | **With Class I Violation Observed in at least one Area** |
| Case Development - Generator Inspection | 1 | 0 |
| Standardized Permit Inspections | 6 | 1 |
| Universal Waste Inspections | 117 | 6 |
| Facility Self-Disclosures | 2 | 1 |
| **Totals** | **126** | **8** |



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# PROGRAM SELF-ASSESSMENT REPORTS

## a. Financial Assurance Review Summary

**Assessment of Financial Assurance Inspection Commitments, RCRA and Non-RCRA**
DTSC staff completed the following financial assurance reviews in support of DTSC programs.

| Financial Assurance Inspections Completed | | |
|---|---|---|
| | Completed 7/1/2014 to 6/30/2015 | Class 1 Violation |
| RCRA Grant Funded | 34 | 1 |
| State Funded (non-RCRA) includes Universal Waste | 23 | 1 |
| Used Oil Contract | 4 | 1 |
| FA for Cleanup 5 Year Review | 4 | 0 |
| Total Financial Assurance Reviews Completed | 65 | 3 |

## b. Missed Financial Assurance Review Commitments

There were 19 financial responsibility reviews that were not completed by the end of FY 2014-2015 but will be inspected by September 30, 2015.



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### c. Financial Assurance Reimbursements and Mechanism Replacements

DTSC processed 15 requests from companies for reimbursement of expenses associated with facility closure or post-closure, 4 mechanism releases or partial releases, and 9 mechanism replacements for FA requirements. The total dollar amount released from FA mechanisms in the reporting period was $28,009,720.47, as detailed in the table below:

| Facility Name | EPA ID No. | Date of Action | Type of Requirement | Requirement Changes | Reimbursement Amounts or Financial Responsibility ($) |
|---|---|---|---|---|---|
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 7/7/2014 | Reimbursement | Ongoing Post-Closure Reimbursement | 62,043.75<br>15,520.50<br>12,344.01<br>231,472.51<br>**Total:** 321,380.77 |
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 7/7/2014 | Reimbursement | Ongoing Post-Closure Reimbursement | 58,770.32<br>16,661.74<br>25,207.09<br>117,776.23<br>**Total:** 218,415.38 |
| Clean Harbors<br>Westmorland<br>Buttonwillow | CAD000633164<br>CAD980675276 | 8/12/2014 | Partial Release | Reduction of Closure Insurance | 3,411,302.00 |
| Safety-Kleen<br>Rancho Cordova | CAT000613950 | 8/12/2014 | Release | Termination of Closure, Post-closure, Corrective Action and Liability Insurance | 749,864.00 |
| Riverbank Oil Transfer | CAL000190816 | 8/14/2014 | Replacement Mechanism | Replacement Mechanism | 76,252.00 |
| PCCR<br>(RP - Momentive) | CAD076180843 | 8/28/2014 | Replacement Mechanism | Replacement Mechanism | 1,150,000.00 |
| Veolia ES Technical Solutions, LLC | CAD008302903 | 9/2/2014 | Replacement Mechanism | Increase Rider for Inflation | 4,587,729.85 |
| Filter Recycling Services | CAD982444481 | 9/5/2014 | Replacement Mechanism | Replacement Mechanism | 1,000,000.00<br>2,000,000.00/ |
| Acme Fill Corporation | CAD041835695 | 9/11/2014 | Reimbursement | Ongoing Post-Closure Reimbursement | 226,557.97 |

# PROGRAM SELF-ASSESSMENT REPORTS

| Facility Name | EPA ID No. | Date of Action | Type of Requirement | Requirement Changes | Reimbursement Amounts or Financial Responsibility ($) |
|---|---|---|---|---|---|
| Siemens Water Technologies / Evoqua Water Technologies | CAD097030993 | 10/21/2014 | Replacement Mechanism | Name Change / Replacement Mechanism | 5,162,039.64 |
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 10/24/2014 | Reimbursement | Ongoing Post-Closure Reimbursement | 63,841.10<br>12,279.45<br>14,073.33<br>86,685.28<br>**Total:** 176,879.16 |
| Kearney/KPF | CAD981429715 | 11/13/2014 | Reimbursement | Ongoing Post-Closure Reimbursement | 310,977.32 |
| Kearney/KPF | CAD981429715 | 11/13/2014 | Reimbursement | Ongoing Post-Closure Reimbursement | 196,374.04 |
| GEM (aka Stericycle) (dba PSC Environmental) | CAD980884183 | 12/19/2014 | Replacement Mechanism | Replacement Mechanism | 960,667.00 |
| Ewaste Center Inc. | CAR000169094 | 12/19/2014 | Release | Facility Closure | 64,166.60 |
| Kearney/KPF | CAD981429715 | 1/12/2015 | Replacement Mechanism | Replacement Mechanism | 1,534,854.89 |
| Acme Fill Corporation | CAD041835695 | 1/16/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 262,846.10 |
| South Eureka Mine (TPDDG Jackson Assoc., LLC) | No EPA ID # | 2/6/2015 | Release | Termination of O&M Agreement | 5,000.00 |
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 3/6/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 53,541.42<br>8,378.34<br>12,197.23<br>98,534.41<br>**Total:** 172,651.40 |
| Acme Fill Corporation | CAD041835695 | 3/18/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 288,369.02 |
| Acme Fill Corporation | CAD041835695 | 3/18/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 251,843.77 |

# PROGRAM SELF-ASSESSMENT REPORTS

| Facility Name | EPA ID No. | Date of Action | Type of Requirement | Requirement Changes | Reimbursement Amounts or Financial Responsibility ($) |
|---|---|---|---|---|---|
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 3/25/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 52,470.86<br>19,950.51<br>15,088.71<br>87,569.31<br>**Total:** 175,079.39 |
| IT Environmental<br>Vine Hill ComplexMontezuma HillsBenson RidgePanoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 3/25/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 56,638.83<br>18,309.29<br>10,638.24<br>94,707.29<br>**Total:** 180,293.65 |
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 3/25/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 43,302.04<br>13,196.21<br>21,771.68<br>108,636.36<br>**Total:** 186,906.29 |
| IT Environmental<br>Vine Hill Complex<br>Montezuma Hills<br>Benson Ridge<br>Panoche | CAD982521460<br>CAD079089512<br>CAD000633289<br>CAD000060012 | 3/25/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 40,971.21<br>14,647.32<br>16,286.67<br>88,877.29<br>**Total:** 160,782.49 |
| Kearney/KPF | CAD981429715 | 4/6/2015 | Reimbursement | Ongoing Post-Closure Reimbursement | 178,487.74 |
| GEM<br>(aka Stericycle)<br>(dba PSC Environmental) | CAD980884183 | 6/22/2015 | Replacement Mechanism | Replacement Mechanism | 0.00 |
| Beckman Coulter | CAD008254708 | 6/22/2015 | Replacement Mechanism | Replacement Mechanism | 4,000,000.00 |
| | | | | | **Total: $28,009,720.47** |

## B. HAZARDOUS WASTE GENERATORS REGULATION
### CUPA Coordination and Support

DTSC provided guidance and technical assistance to local regulators and the regulated community during the reporting period. DTSC continued its partnership with California Environmental Protection Agency (CalEPA) and the CUPAs to meet the goals in the RCRA Grant work plan and provide suitable protection for California citizens from RCRA hazardous waste and from non-RCRA hazardous waste. Through support and oversight of the statewide CUPA program, DTSC ensured that the goals for generator compliance with RCRA and non-RCRA hazardous waste handling requirements were monitored appropriately and consistently by the CUPAs. DTSC conducted the following activities in support of this goal:

#### 1. Assistance

Between July 1, 2014 and June 30, 2015, DTSC received 493 calls and e-mail questions from CUPAs, with 54 of these calls and e-mails relating directly to RCRA issues. An additional 150 calls and e-mails were received from members of the regulated community and the public, with 35 of these questions directly related to RCRA issues.

DTSC provided technical assistance to the CUPAs at the Bay Area, Southern, Central, and Joint Central/Southern CUPA Forum meetings, and at the Northern and Southern California CUPA Hazardous Waste Technical Advisory Group meetings.

#### 2. External Training

Training provided or funded by DTSC is a major component of the effort to maintain consistent statewide enforcement of hazardous waste laws and regulations. DTSC committed 10,000 dollars in contract funds to support the training needs and activities for the CUPAs, DTSC staff, industry and the regulated community. DTSC staff participates in the Unified Program Trainers Committee which is composed of state and local training coordinators. Through this committee, DTSC staff worked closely with the CUPAs to assess training needs and plan and coordinate CUPA training. The specific trainings that DTSC conducted or were involved in are described as follows:

# PROGRAM SELF-ASSESSMENT REPORTS

| CUPA Name County/City or at the CUPA Conference | Training Date | Types of Trainings Provided | Number of Attendees | Corrective Action (voluntary or a part of clearing a CUPA evaluation deficiency ) |
|---|---|---|---|---|
| Cities of Alameda, Berkeley, Fremont, San Leandro, and Union City; Counties of Alameda, Contra Costa, Napa, San Francisco, Santa Clara; DTSC, and US EPA | 7/8/14 | Tiered Permitting (Permit By Rule (PBR) including cyanide treatment, tank integrity assessment) | 43 | Deficiency clearing for Union City<br><br>Voluntary for all others |
| Counties of Ventura, Santa Barbara, San Luis Obispo, City of Oxnard | 7/22/14 | Tiered Permitting ( PBR including cyanide treatment, tank integrity assessment) | 26 | Deficiency clearing for Ventura County<br><br>Voluntary for all others |
| City of Los Angeles | 11/18/14 | Participating Agency Training | 4 | Clearing deficiency |
| UC Berkeley Labor Occupational Health Program | 12/9-10/14 | Hazardous Waste Generator | 54 | Voluntary |
| UC Berkeley Labor Occupational Health Program | 1/21/15 | Hazardous Waste Generator | 28 | Voluntary |
| CUPA Conference | 2/2/15 | Recycling Exemptions and Exclusions | 100 | Voluntary |
| CUPA Conference | 2/2/15 | Waste Determination at Remediation Sites | 40 | Voluntary |
| UC Berkeley Labor Occupational Health Program | 4/22/15 | Hazardous Waste Generator | 29 | Voluntary |
| Counties of Amador, Calaveras, Colusa, Glenn, Lassen, Mendocino, Nevada, Placer, Shasta, Sutter, Tehama, Yolo; and Yolo County DA's Office, West Sacramento Fire Department | 6/11/15 | Hazardous Waste Generator | 29 | Deficiency clearing for Yolo County<br><br>Voluntary for all others |
| Counties of Amador, Calaveras, Colusa, Glenn, Lassen, Mendocino, Nevada, Placer, Sutter, Tehama, Yolo; and Yolo County DA's Office, West Sacramento Fire Department | 6/12/15 | Tiered Permitting (PBR including cyanide treatment, tank integrity assessment) | 17 | Deficiency clearing for Yolo County<br><br>Voluntary for all others |



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| CUPA Name County/City or at the CUPA Conference | Training Date | Types of Trainings Provided | Number of Attendees | Corrective Action (voluntary or a part of clearing a CUPA evaluation deficiency ) |
|---|---|---|---|---|
| Counties of San Benito, Santa Cruz, and Monterey | 6/18/15 | Hazardous Waste Generator and Condensed Recycling | 10 | Deficiency clearing for San Benito County<br><br>Voluntary for all others |

**California Compliance School**
DTSC and the California Community Colleges continued their joint-effort operation of the California Compliance School (CCS). CCS offers basic instruction on compliance with State and Federal hazardous waste laws and regulations.

- The CCS provided three-day "Hazardous Waste Generator Standards" training sessions:
  - July 22-24, 2014, (23 business students trained) in Pleasanton.
  - August 5-7, 2014, (23 students trained) in El Segundo.
  - August 12-14, 2014, (23 students were trained) in Oakland.
  - September 9-11, 2014, (23 students were trained) in San Diego.
  - September 16-18, 2014, (25 students were trained) in Sacramento.
  - October 7- 9, 2014, (14 DTSC staff were trained) in Sacramento.
  - October 14-16, 2014, (20 students were trained) in Orange County.
  - November 3- 5, 2014, (20 students were trained) in Oakland.
  - December 8-10, 2014, (25 students were trained) in El Segundo.
  - January 14-16, 2015 (25 students were trained) in San Diego.
  - January 20-22, 2015 (23 students were trained) in Sacramento.
  - March 2-4, 2015 (21 students were trained) in Anaheim.
  - March 10-12, 2015 (20 students were trained) in Alameda County.
  - April 7-9, 2015 (25 students were trained) in El Segundo.
  - May 5-7, 2015 (23 students were trained) in San Diego.
  - May 12-14, 2015 (25 students were trained) in Sacramento.

- CCS also conducted Department of Transportation (DOT) training for 20 students in Oakland on July 9 - 10, 2014.

**CalEPA Basic Inspector Academy**
DTSC continued its involvement in the CalEPA Basic Inspector Academy. DTSC coordinated the classes and provided three instructors for each of the following classes:

- August 12-15, 2014 (14 local agency staff trained) in Eureka.
- September 16-19, 2014 (40 local agency staff trained) in Roseville.
- October 7-10, 2014 (36 local agency staff trained) in Modesto.
- November 18-21, 2014 (40 local agency staff trained) in Riverside.
- January 13-16, 2015 (26 local agency staff trained) in Redding.

- February 24-27, 2015 (36 local agency staff trained) in Bakersfield.
- March 17-20, 2015 (46 local agency staff trained) in Sacramento.
- April 7-10, 2015 (32 local agency staff trained) in Salinas.
- May 12-15, 2015 (40 local agency staff trained) in South Lake Tahoe.
- June 9-12, 2015 (25 local agency staff trained) in Concord.

**California Hazardous Materials Investigators Association Training Conference**

On April 15-17, 2015, DTSC attended the annual California Hazardous Materials Investigators Association (CHMIA) Training Conference in the city of Shell Beach. Only CHMIA members attend this training conference, which is designed for regulators and law enforcement and focused on theories and techniques used in investigating environmental crime. Meeting attendees included individuals with duties related to the enforcement of environmental laws and regulations and those who are employed by the Federal Government, the State of California, counties and municipal subdivisions of the State of California, or of any other state. Prosecuting attorneys engaged in environmental crimes prosecutions, and the California District Attorneys Association Environmental Circuit Prosecutors Project and their agents also attended this conference. DTSC provided a brief presentation on sovereign citizens, to explain how to recognize this anti-government group, understand the threat they can pose, and safety precautions regulators should consider. This conference was well-attended and generated positive feedback.

**California/US EPA CID Joint Advanced Environmental Crime Training Program (AECTP)**

DTSC continued to support the AECPT by providing instructors to present "Environmental Enforcement Field Sampling" and "Hazardous Waste Classification"; and provided three staff members as facilitators in support of the 26-hour field exercise. The training course was presented on April 28 - May 8, 2015 at the California Specialized Training Institute (CSTI). Thirty-six students attended the training.

**Continuing Challenge**

Three DTSC instructors conducted training for 12 first responders on how to investigate an environmental crime at the Continuing Challenge HazMat Workshop held in Sacramento on September 2, 2014.

**Environmental Enforcement Field Sampling**

DTSC staff conducted one training class in Riverside for 36 local agency staff on September 26, 2014. This training provided investigators and inspectors with a practical approach to conducting environmental field sampling for the purpose of enforcement. The class included both classroom and hands-on teaching with sampling tools used during environmental field sampling.

DTSC staff conducted an environmental sampling class in Sacramento for the Sacramento County CUPA and the California Department of Fish and Wildlife on May 20, 2015. Twenty five students participated in the training.

**"Introduction to Environmental Enforcement" for the State of Washington**
DTSC personnel presented "Defensible Note Taking and Report Writing" to 60 members of the State of Washington's Department of Ecology on April 20-21, 2015.

**US EPA Region 9 Basic Inspector Training**
This course teaches environmental inspectors core knowledge and skills (collecting evidence, documentation, interviewing) needed to conduct quality inspections. This class was held at the San Francisco US EPA Region 9 office on December 10 and11, 2014, where 15 local agency staff were trained.

**Western States Project Verbal Judo**
This course taught regulatory inspectors techniques to redirect and handle emotionally charged verbal attacks to generate voluntary compliance. Western States provided this class in San Diego on October 7 – 9, 2014 (64 local agency staff were trained), and in San Francisco sponsored by and held at the US EPA Region 9 office on November 12 and 13, 2014. Ten DTSC staff and seven local agency staff, in addition to US EPA staff, were trained.

**Witness Testimony Training**
DTSC has developed a "Witness Testimony" training course that blends online virtual inspection and classroom instruction. Twenty-five DTSC and local agency staff completed the Auto Body Repair Shop online virtual inspection. They will take the Witness Testimony classroom training portion next fiscal year.

### 3. Periodic Evaluations Of Local CUPA Programs

There are 82 CUPAs in California, including those managed by DTSC in Imperial and Trinity Counties. For these 82 CUPAs, DTSC performs oversight functions which include:

- assisting with regulatory interpretations on inspections and enforcement; evaluating each CUPA on the hazardous waste portions of the CUPA program during the CalEPA triennial evaluation;
- participating in various CUPA forum meetings and workgroups; coordinating with other local, State, and federal agencies regarding the CUPA Program; conducting independent oversight inspections;
- providing technical assistance; and
- providing classroom and in-the-field training.

CalEPA conducted 32 CUPA evaluations between July 1, 2014 and June 30, 2015. DTSC participated in 28 evaluations and conducted 48 oversight inspections of CUPA staff.

## C. Complaint Investigations

DTSC's EnviroStor data management system shows 584 complaints were received from July 1, 2014 through June 30, 2015. These complaints and the resulting actions taken on those complaints, are shown in the following table.

| COMPLAINTS HANDLED 7/1/2014 TO 6/30/2015 | |
|---|---|
| | **TOTAL** |
| **Complaints Received for FY 2014/2015** | **584** |
| | |
| **Complaints where Class I Violations were detected during FY 2014/2015** | **9** |
| | |
| **Complaint Actions:** | |
| Complaints Under Investigation (Assigned with no activity, and Active complaints) by EERD staff | 42 |
| Complaints Investigated and Closed | 28 |
| Complaints Investigated, Under Investigation by Office of Criminal Investigations (OCI) | 23 |
| Pending (Unassigned Complaints) | 5 |
| Evaluated - No Further Action | 11 |
| **Complaint Actions Total** | **109** |
| | |
| **Complaints Referred:** | |
| Referred to CUPA | 441 |
| Referred to Other Local Agency | 18 |
| Referred to US EPA | 2 |
| Referred to Other Federal Agencies | 6 |
| Referred to Other State Agencies | 22 |
| Referred (Assigned) to DTSC Programs other than Enforcement or OCI | 3 |
| **Complaints Referred Total*** | **492** |
| | |
| **Complaint Actions Total (also including complaints from prior fiscal years)** | **601** |

* Note: When a complaint is referred to more than one entity, only the first entity is counted as a referral. This is done to prevent double or triple counting a small number of complaints referred to multiple agencies.

## D. Enforcement Activities

### 1. Formal Enforcement

Between July 1, 2014 and June 30, 2015, DTSC initiated formal enforcement actions for 50 cases. Ten of these cases have been referred to the Office of the Attorney General or the local District Attorney. These cases have not had administrative orders issued or civil complaints filed, and negotiations for these cases are in progress. The ten cases are currently considered confidential and are not listed in the table below. They are not included in the narratives in Appendix A.

DTSC settled 29 cases through civil or administrative action, resulting in fines and penalties totaling $2,706,463. As shown in the following tables, $2,331,883 in penalties was assessed for 16 RCRA funded inspections and a total of $374,580 in penalties was assessed for 13 non-RCRA funded inspections. The following tables identify each of the completed DTSC formal enforcement cases. Specific narratives for the initiated and settled cases are found in Appendix A.

| Enforcement Settlements from RCRA Funded Inspections | | | | | | | |
|---|---|---|---|---|---|---|---|
| **State or Federal ID Number** | **Name of Facility** | **Inspection Date** | **Inspection Type Code*** | **Enf Type Code ** ** | **Enf Action Date** | **Days from Inspect to First Enf Action** | **Settled Amount** |
| CAD041835695 | ACME FILL CORPORATION | 05/26/2011<br>11/16/2011 | CEI<br>FR | 385 | 7/25/2014 | 1156 | $40,000 |
| CAD041835695 | ACME FILL CORPORATION | 09/09/2014 | CEI | 385 | 03/20/2015 | 192 | $3,094 |
| CAL000317239 | ALL COUNTY ENVIRONMENTAL & RESTROATION INC. | 07/09/2014 | CEI | 385 | 8/22/2014 | 44 | $10,500 |
| NONE | AMERICAN ABRASIVE PRODUCTS INC | 11/28/2011 | COMPLAINT | 385 | 04/06/2015 | 1225 | --- |
| CAD028277036 | ASBURY ENVIRONMENTAL SERVICES | 08/19/2013<br>09/02/2013<br>01/08/2014 | FSD<br>FSD<br>FSD | 385 | 03/06/2015 | 564 | $7,000 |
| CAL000300636 | COACHELLA VALLEY WATER DISTRICT WELL 6806 | 06/26/2014 | FSD | 385 | 02/02/2015 | 221 | $9,405 |
| CAD003963592 | ECS REFINING | 10/28/2009<br>01/24/2011 | FCI<br>CEI | 385 | 4/8/2015 | 1988 | $218,780 |
| CAD097030993 | EVOQUA WATER TECHNOLOGIES LLC | 05/20/2013 | CEI | 385 | 8/7/2014 | 444 | $11,000 |
| CAD097854541 | EXIDE TECHNOLOGIES INC. | 08/16/2013<br>04/29/2014<br>08/05/2014 | FCI<br>FCI<br>CEI | 310 | 11/21/2014 | 462 | $1,286,374 |
| NONE | HAZARDOUS MATERIAL TRANSPORTATIO N, INC. | 10/28/2014 | COMPLAINT | 385 | 06/30/2015 | 245 | $4,000 |
| CAL000174097 | KROEKER INC | 11/19/2013 | CEI | 385 | 7/17/2014 | 240 | $4,248 |

# PROGRAM SELF-ASSESSMENT REPORTS

| Enforcement Settlements from RCRA Funded Inspections | | | | | | | |
|---|---|---|---|---|---|---|---|
| **State or Federal ID Number** | **Name of Facility** | **Inspection Date** | **Inspection Type Code*** | **Enf Type Code ****| **Enf Action Date** | **Days from Inspect to First Enf Action** | **Settled Amount** |
| CAR000054031 | NEUTROGENA CORP | 03/17/2010 | CEI | 510<br>263<br>610 | 11/24/2014<br>12/12/2014<br>12/12/2014 | 1713 | $416,243 |
| CAL000084517 | SAFETY-KLEEN SYSTEMS INC | 09/27/2012 | CEI | 385 | 8/7/2014 | 679 | $49,239 |
| NONE | SAMEX | 10/28/2014 | COMPLAINT | 385 | 06/30/2015 | 245 | $2,000 |
| CAL000292826 | SCHAFFER GRINDING COMPANY | 11/16/2011 | COMPLAINT | 385 | 03/09/2015 | 1209 | $160,000 |
| CAL000291177 | SYNERGY | 07/26/2012 | COMPLAINT | 510<br>263<br>610 | 7/21/2014<br>7/23/2014<br>8/7/2014 | 725 | $110,000 |
| **Number of RCRA Funded Cases Settled =** | | | **16** | | | | |
| **Total Settlement** | | | | | | | **$2,331,883** |

***Inspection Type Code**

| | |
|---|---|
| **CEI** | **Compliance Evaluation Inspection** |
| **FR** | **Financial Assurance Review** |
| **FCI** | **Focused Compliance Inspection** |
| **FSD** | **Facility Self Disclosure** |

****Enforcement Type Code**

| Enforcement Type Code (Enf Type Code) | Description |
|---|---|
| **210** | **Enforcement Order Issued** |
| **263** | **Injunctive Relief** |
| **310** | **Final Administrative Settlement** |
| **385** | **Consent Order With Enforcement and Settlement – Federal CA/FO** |
| **410** | **Referred to Attorney General** |
| **510** | **Initial Civil Filing Attorney General** |
| **610** | **Final Civil / Judicial Action** |
| **730** | **Criminal Conviction** |

# PROGRAM SELF-ASSESSMENT REPORTS

| Enforcement Actions from Non-RCRA Funded Inspections | | | | | | | |
|---|---|---|---|---|---|---|---|
| **State or Federal ID Number** | **Name of Facility** | **Inspection Date** | **Inspection Type Code*** | **Enf Type Code ** ** | **Enf Action Date** | **Days from Insp to First Enf Action** | **Settled Amount** |
| CAL000347305 | 3R INTERNATIONAL GROUP | 12/11/2013 | NRR | 210 | 04/28/2015 | 524 | --- |
| CAD983620402 | ADVANCED CLEANUP TECHNOLOGIES INC. | 10/15/2013 | COMPLAINT | 385 | 7/28/2014 | 286 | $195,000 |
| CAL000336810 | ADVANCED CLEANUP TECHNOLIGIES INC. | 08/04/2011 | COMPLAINT | 510<br>610 | 12/15/2014<br>03/04/2015 | 1229 | $28,000 |
| CAL912823785 | BLACK STAR OIL COMPANY INC. | 12/21/2012 | CEI | 385 | 9/18/2014 | 636 | $3,000 |
| CAL000375092 | CRYSTAL BLUE ENVIRONMENTAL | 10/22/2013 | CEI | 385 | 9/18/2014 | 331 | $5,500 |
| NONE | ELECTRONIC RECYCLING | 11/14/2013 | COMPLAINT | 385 | 01/22/2015 | 434 | $16,500 |
| CAD982444481 | FILTER RECYCLING SERVICES | 09/20/2007 | COMPLAINT | 310 | 10/21/2014 | 2588 | $75,000 |
| NONE | PICK & EARN RECYCLING | 04/25/2013 | FCI | 385 | 8/28/2014 | 490 | $5,000 |
| CAD044003556 | RAMOS ENVIRONMENTAL SERVICES | 05/29/2013 | CEI | 385 | 9/10/2014 | 469 | $5,500 |
| CAL000359908 | STOODY INDUSTRIAL & WELDING SUPPLY | 11/29/2010 | COMPLAINT | 385 | 06/26/2015 | 1680 | $3,000 |
| CAL000381082 | THERMO FLUIDS INC. | 01/15/2014 | CEI | 385 | 11/10/2014 | 299 | $16,280 |
| NONE | VINTAGETECH RECYCLING | 08/20/2014 | COMPLAINT | 385 | 03/27/2015 | 219 | $6,800 |
| CAL000267271 | WTP | 03/13/2014 | FCI | 385 | 12/9/2014 | 271 | $15,000 |
| **Number of non-RCRA Funded Cases Settled =** | | | **13** | | | | |
| **Total Settlement** | | | | | | | **$374,580** |

***Inspection Type Code**

| | |
|---|---|
| **CEI** | **Compliance Evaluation Inspection** |
| **FCI** | **Focused Compliance Inspection** |
| **NRR** | **Non-financial Records Review** |

****Enforcement Type Code**

| Enforcement Type Code (Enf Type Code) | Description |
|---|---|
| 210 | Enforcement Order Issued |
| 263 | Injunctive Relief |
| 310 | Final Administrative Settlement |
| 385 | Consent Order With Enforcement and Settlement –Federal CA/FO |
| 410 | Referred to Attorney General |
| 510 | Initial Civil Filing Attorney General |
| 610 | Final Civil / Judicial Action |

**2. Other Enforcement Activities: (Actions which are not confidential)**

**Crystal Geyser Roxane Water Company, City of Olancha, Inyo County: CAR000031203.** The Crystal Geyser Roxane Water Company (CG Roxane) produces bottled drinking water under the trade name of Crystal Geyser. DTSC received notice of an Enforcement Order dated July 24, 2014, issued by the Lahontan Regional Water Quality Control Board (LRWQCB) to CG Roxane for subsurface characterization of potential contamination around three disposal ponds. The LRWQCB conducted their inspection on March 1, 2013, in which they discovered and sampled the ponds, and reported to DTSC abnormally high arsenic levels in one of the ponds.

On September 24, 2014, DTSC conducted sampling of three on-site disposal ponds, a distribution box, and a meadow at CG Roxane. Samples were taken of both liquids and sediments. On October 17, 2014, DTSC conducted further sampling of the wastewater stream. The arsenic waste was generated when drinking water passed through filters specifically to remove arsenic. The filters became saturated, and were then regenerated utilizing sodium hydroxide and sulfuric acid. The back flush water was then conveyed to the single lined arsenic pond. The company has ceased using the arsenic pond, and it has since been removed. DTSC is working in conjunction with the LRWQCB on the removal of arsenic waste from the property.

**Exide Technologies, Inc., City of Vernon, Los Angeles County: CAD097854541.** In accordance with the November 21, 2014 Stipulation and Order, Exide has been working on the removal of feedstock materials out of the containment building, due to failure of the leak detection system. DTSC has been on-site, in support of permitting activities, to oversee the implementation of

an approved Containerization Plan for the hazardous waste stored in the feed rooms of the Containment Building.

On March 11, 2015, The United States Attorney's Office and Exide reached a Non-Prosecution Agreement (NPA) with Exide, as a result of a transportation investigation by US EPA and the US Department of Transportation (DOT), assisted by DTSC. The investigation began with a tip from Los Angeles County Hazmat response regarding a leaking truck at a California Highway Patrol Truck stop in Castaic. DTSC initiated an investigation, and then made the referral to federal authorities. In the agreement, Exide acknowledged criminal conduct, including: illegal storage of corrosive and lead- contaminated hazardous waste inside leaking van trailers, owned by Wiley Sanders Truck Line, parked at the facility; knowingly causing the disposal of corrosive and lead-contaminated hazardous waste by allowing it to leak from van trailers, owned by Wiley Sanders Truck Line Inc., parked at the facility; knowingly and willfully causing the shipment of lead- contaminated hazardous waste inside leaking van trailers, owned by Wiley Sanders Truck Line Inc., and operated by Lutrel Trucking Inc. and KW Plastics from the (Vernon) facility to Bakersfield, California; and knowingly causing the transportation of hazardous waste contaminated with corrosive acid to the KW Plastics facility in Bakersfield, California that was not permitted by DTSC to receive corrosive hazardous wastes.

Exide admits that each charge occurred for a significant number of times over the past two decades, in violation of federal law. In the agreement, Exide committed to immediately and permanently close the Vernon facility in accordance with closure and cleanup agreements, in exchange for prosecution for the felony violations. In conjunction with the commitment to permanently close the Vernon facility, Exide also entered into an amendment to the DTSC 2014 Stipulation and Order that spelled out Exide's funding schedule for closure and post-closure work, among other things.

Since March 11, 2015, when the Exide facility shut down in accordance with the NPA, DTSC has overseen the removal of hazardous waste from the facility. Feedstock materials from both the upper and lower feed rooms have been removed. Exide is currently working on the removal of wastes from the blast furnace feed room. The feedstock materials that have been removed have been shipped by truck to an Exide facility in Muncie, Indiana for processing. A significant amount of liquids has also been removed from the containment building and held in temporary tanks, before being shipped off-site. DTSC inspectors performed verification sampling on the liquids in the tanks before it was processed and/or shipped. Exide was also ordered to sample and remove lead contaminated soil from residential properties in the area surrounding the facility. DTSC continues to conduct oversight of the soil sampling and removal activities, and provides support to the community meetings regarding the residential soil clean-up.

**Pacific Oil Company, City of Reseda, Los Angeles County: CAD983615501.** On May 18, 2011, DTSC began a complaint investigation at Pacific Oil Company (POC). POC primarily transports used oil out-of-state to Botavia Energy LLC, located in Arizona. During the investigation, the following violations were discovered: failure to submit completed copies of manifests to the Department within 15 days after the hazardous waste was accepted by the designated facility on the manifest; failure to obtain handwritten signature of the transporter or of the owner or operator of the designated facility on the manifest; failure to submit an annual report on March 1, regarding the used oil transported during the preceding calendar year; failure to submit an annual report on March 1, regarding the used oil transported out of the state during the preceding calendar years; and transferring custody of a hazardous waste to a transporter who does not hold a valid registration issued by the Department. On October 16, 2012, the case was referred to the California Office of the Attorney General, and on April 15, 2013, an Enforcement Order was issued to the facility for the violations. On August 28 and September 16, 2013, an Administrative Hearing for the case was held, and a proposed Decision was issued by the Administrative Law Judge (ALJ) on November 4, 2013. The ALJ's decision upheld the violations, but recommended a reduced penalty; however, on January 7, 2014, DTSC gave notice to the parties that it had not adopted the ALJ's decision. On May 15, 2014, POC filed an appeal with the Los Angeles Superior Court, and a civil suit against DTSC. A hearing for the appeal was held on March 19, 2015, and on June 17, 2015, the appeal was denied. Subsequently, the parties agreed to go to mediation.

**Seacor Marine [aka Gulf Offshore Logistics, (GOL)], Dockside, Port of Hueneme, Ventura County: LAD985217819 (Complaint).** On March 27, 2014, following up on a load rejection, DTSC staff conducted a transporter investigation of GOL, a Louisiana shipping company which services offshore oil production rigs nationwide. Freeport (the generator) is the owner of four offshore oil production platforms operating in the Santa Barbara Channel; and the generator of hazardous waste transported from the platforms to dockside at the Port of Hueneme by GOL. Through a manifest review during the investigation, it was discovered that some hazardous waste had been stored in a secondary transporter's yard (T & T) in Ventura since December 2012. Nine roll-off bins were discovered and were quarantined. The bins contained radioactive and mixed radioactive/hazardous waste. A revised work plan for the waste classification and sorting of the bins was received by DTSC in October; work will commence as soon as a work plan is approved. DTSC is coordinating with the California Department of Public Health's Radiologic Health Branch, regarding permitting requirements and disposal options for this radioactive waste. The Ventura County Environmental Health Division (CUPA) has also been kept informed of the investigation.

## E. Data Entry, Management And Reporting

**Data Entry and Management**
DTSC tracks inspection and enforcement related data in the EnviroStor database. EERD works in coordination with DTSC's Data Management Unit and US EPA Region 9 to ensure data quality. The details are described in the Information Management Section of this Program Self-Assessment.

## F. Miscellaneous Activities

### 1. Compliance Incentives, Self-Disclosures

During the reporting period, DTSC received three self-disclosure notifications, investigated two self-disclosure notifications (with one resulting in a Class I violation). Four cases resulting from self-disclosure investigations were settled/closed:

- Asbury Environmental Services, CAD028277036, Self-Disclosures dated 6/17/2013, 6/27/2013, 9/30/2013; all settled 3/6/2015.
- Coachella Valley Water District, CAL000300636, Self-Disclosure dated 4/29/2014; settled 2/2/2015.

### 2. Compliance Assistance, 30-Day Storage Extension Requests

If RCRA waste must remain onsite for longer than 90 days due to unforeseeable, temporary, or uncontrolled circumstances, a one-time extension of up to 30 days may be granted at DTSC's discretion on a case-by-case basis pursuant to California Code of Regulations, Title 22, section 66262.34 (c). Generators seeking such an extension must submit a written request to DTSC. Extensions are granted in writing. From July 1, 2014 to June 30, 2015, DTSC received 16 applications for an extension. In order for a requestor's application to be approved, the application must have the following:

1) Be complete and contains all requested information;
2) Have an original signature; and
3) Be received by DTSC prior to the date the 90-day accumulation time expires.

The following is a summary of 30-day extension requests for generator onsite accumulation of RCRA hazardous waste received between July 1 and June 30, 2015:

**Summary of 30-Day Extension Requests FY 2014/2015**

| Facility | ID Number | City, County | Approval /Denial |
|---|---|---|---|
| Aerojet Rocketdyne | CAD008368987 | Canoga Park, Los Angeles | Approved |
| AMPAC Fine Chemicals | CAR000069153 | Ranch Cordova, Sacramento | Approved |
| Burke Industries | CAD009118886 | San Jose, Santa Clara | Approved |
| Burke Industries | CAD009118886 | San Jose, Santa Clara | Approved |
| Cal/Trans | | Banning, Riverside | Denied |
| Chevron Pipeline Co. | CAT000614669 | La Mirada, Los Angeles | Approved |
| Honeywell | CAD074644659 | Newark, Alameda | Approved |
| NASA – Santa Susana Field Lab. | CA1800090010 | Canoga Park, Los Angeles | Approved |
| Navy Ventura County | CA7170090206 | San Nicolas Island, Ventura | Approved |
| Shell Pipeline – LP-Carneras Pump Station | CAT000164319 | Lost Hill, Kern | Approved |
| The Boeing Co., SSFL | CAD093365435 | Simi Valley, Ventura | Approved |
| The Boeing Co., SSFL | CAD093365435 | Simi Valley, Ventura | Approved |
| United Airlines, Inc. | CAD041319294 | San Francisco, San Mateo | Approved |
| US Dept. of Agriculture | CA6120507342 | Albany, Alameda | Approved |
| US Dept. of Agriculture | CA6120507342 | Albany, Alameda | Approved |
| West Coast Wood Processing/Pacific Wood Processing | CAT000611145 | Bakersfield, Kern | Approved |

Approved: 15
Denied: 1
Withdrawn: 0
**Total: 16**

### 3. Permit Assistance, Review Of Permits Or Permit Modifications

EERD reviewed the following Permit or Permit Modification requests and provided comments to the Permitting Division. Also included are activities that EERD assisted with, such as preparation of Disclosure Statement Compliance Reports and Compliance History:

- Asbury Environmental Services, City of Modesto, Stanislaus County: CAL000330453

- Central Wire (Formerly Techalloy), City of Perris, Riverside County: CAD059277137
- Clean Harbors Environmental Services, Inc., Port of Redwood City Transfer Facility, Redwood City, San Mateo County: CAD982439895
- Clean Harbors San Jose LLC, City of San Jose, Santa Clara County: CAD059494310
- Clean Harbors Los Angeles LLC, City of Los Angeles, Los Angeles County: CAD050806850
- CleanTech Environmental Inc., City of Irwindale, Los Angeles County: CAL000330453
- DeMenno Kerdoon, City of Compton, Los Angeles County: CAT080013352
- Exide Technologies Inc., City of Vernon, Los Angeles County: CAD097854541
- General Electric Anaheim, City of Anaheim, Orange County: CAD030584502
- KW Plastics of California, City of Bakersfield, Kern County: CAD982435026
- Pacific Resource and Recovery Services, Inc., City of Los Angeles, Los Angeles County: CAD008252405
- Phibro-Tech, Inc., City of Santa Fe Springs, Los Angeles County: CAD008488025
- Quemetco, City of Industry, Los Angeles County: CAD066233966
- Solar Turbines, City of San Diego, San Diego County: CAD008314908
- Southern California Edison Co., San Onofre Nuclear Generating Stations, City of San Clemente, Orange County: CAD000630921
- W.I.T. Sales and Refining, City of San Jose, Santa Clara County: CAD980888598

## G. California/Mexico Border Program

### 1. Border 2020 Program Coordination And Support

DTSC is an active participant in the Border 2020 bi-national meetings and the local San Diego County Hazardous Waste Task Force meetings. DTSC staff has direct communication with PROFEPA (Mexico's Federal Enforcement Agency) and SEMARNAT (Mexico's Federal Secretariat of the Environment and Natural Resources) officials to request information on facilities operating south of the border that are importing hazardous waste and e-waste from California. This open communication with PROFEPA and SEMARNAT officials is essential during DTSC's investigations and enforcement activities.

DTSC plans, organizes, and implements training on import and export requirements for the maquiladoras, Mexican government officials, industry, and non-governmental agencies. The past two training workshops were conducted as a joint effort with PROFEPA and SEMARNAT. Also, one of DTSC's activities is to provide support to the US Customs and Border Protection (CBP) on special projects related to imports/exports of hazardous waste/hazardous material.

**Border Training, Workshops, and Meetings**

**Applicable Regulations and Risk Reduction of Contaminants for Pesticide Distributors and Farmers Training Workshop, City of Mexicali, Baja California, Mexico:** On October 8, 2014, DTSC and the California Department of Pesticide Regulations (DPR), Mexican Department of Agriculture (SAGARPA) and other Mexican federal agencies participated in a training workshop entitled "Applicable Regulations and Risk Reduction of Contaminants for Pesticide Distributors and Farmers in the City of Mexicali, Baja California, Mexico. The training workshop was organized by SAGARPA. DTSC staff provided a presentation on Waste Pesticide Management with an emphasis on hazardous waste classification determination and management. DPR provided training on state and federal regulations applied to imported vegetables from Mexico and other countries to determine pesticide residues. Approximately, 50 people from the industry and farming sector attended the training workshop.

**Applicable Regulations and Risk Reduction of Contaminants for Pesticide Distributors and Farmers Training Workshop, City of Ensenada, Baja California, Mexico:** On October 9, 2014, DTSC and DPR, SAGARPA and other Mexican federal agencies participated in a training workshop entitled "Applicable Regulations and Risk Reduction of Contaminants for Pesticide Distributors and Farmers" in the City of Ensenada, Baja California, Mexico. The training workshop was organized by SAGARPA. DTSC staff provided a presentation on Waste Pesticide Management with an emphasis on hazardous waste classification determination and management. DPR provided training on state and federal regulations applied to imported vegetables from Mexico and other countries to determine pesticide residues. Approximately, 50 people from the industry and farming sector attended the training workshop.

**Border 2020 California/Baja California Regional Workgroup, City of Imperial Beach, San Diego County:** On September 3, 2014, DTSC attended the California/Baja California Regional Workgroup meeting in the City of Imperial Beach. The following agenda items were covered: Welcome and Introductions by Jeff Scott; Director Land Division, US EPA Region 9; Border 2020 Overview, California/Baja California Regional Workgroup Priorities; Programmatic Priorities and Future Actions; Discussion and Questions; and, Closing and Next Steps. As part of Border 2020 Goal 5 - Enhance Compliance Assurance and Environmental Stewardship, DTSC provided a presentation on the Border Inspection Program and Training Workshops to be provided in the border region.

**California Border Environmental Task Force Meeting, City of San Diego, San Diego County:** On September 3, 2014, DTSC attended the California Border Environmental Task Force Meeting held in the City of San Diego. The agenda items covered were: Reports by US EPA, CBP, DTSC, Department of Resources Recycling and Recovery (CalRecycle), County of San Diego, California Department of Public Health, the San Diego Regional Water Quality Control Board, Office of the Attorney General and Local Enforcement Agency.

DTSC provided the following updates: Inspections at the ports of entry, and a training workshop to be held in Calexico with CBP and Pacific Steel, Inc. Other agencies gave updates regarding the management of pesticides, e-waste, exports of hazardous waste and other environmental issues affecting the border region.

**California/Mexico Border Relations Council, City of San Diego, San Diego County:** On October 22, 2014, DTSC attended the California-México Border Relations Council Meeting in the City of San Diego. The agenda included the following: Welcome from Matt Rodriguez, Cal EPA Secretary; Updates/Collaboration on the Border Governors Conference; Transportation Border Issues; Waste Tires; Border Projects; Border 2020; California-Mexico Memorandum Of Understanding; 2012-2013 Border Council Report; border related legislative updates; and an update of Baja California programs. A presentation was provided on DTSC's San Diego Field Office border inspection program at the Ports of Entry and the training workshops provided along the California-Mexico border region.

**California/Mexico Border Training, City of Calexico, Imperial County:** On October 22, 2014, DTSC staff provided training to U.S brokers in the City of Calexico on Import/Export Requirements. The training workshop was organized by CBP. Other agencies providing training were: US EPA (pesticide regulations); U.S. Department of Transportation (labeling/placarding of hazardous material); and, CBP (material safety data sheets and HazMat classification). As a result, U.S. brokers received important information on import/export requirements for hazardous waste, universal waste, scrap metal and e-waste.

**Multi-Agency Agency Border Meeting, City of San Diego, San Diego County:** On January 15, 2015, DTSC held a border meeting with San Diego County Hazardous Materials Division; CBP was unable to attend the meeting. The following agenda items were discussed: DTSC and County of San Diego updates, new border enforcement cases, containment of RCRA filter cake for transport, Land Disposal Restriction (LDR) documentation with RCRA waste, transporter registrations/endorsements, southbound inspections, and border trainings.

**U.S-Mexico Border 2020 Waste Policy Forum Meeting, City of Tijuana, B.C. Mexico:** On February 10-11, 2015, DTSC attended the annual U.S.-Mexico Border 2020 Waste Policy Forum Meeting in the City of Tijuana, Baja California. Representatives from local, state and federal Mexican and U.S. border states attended the meeting. Also present were representatives from the private sector, academia, public and non-governmental organizations. DTSC was the only state agency present at this meeting. Various representatives from the border states provided presentations on projects related to waste tires, solid waste, spent lead acid batteries and e-waste materials. DTSC provided a brief presentation on the California Border Program, describing DTSCs hazardous waste inspections at

the ports and the training provided to the regulated sector south of the border. The meeting was very well organized, well attended, and had a lot of audience participation, especially from the public and non-governmental organizations.

**Border Coordinators Exchange of Information Meeting, City of San Diego, San Diego County:** On April 27, 2015, DTSC participated in the Border Coordinators Exchange of Information Meeting via conference call. The agenda included the following: Welcome and Introduction, 1st Draft of 2014 California-Mexico Border Relations Council Report, Border Coordinator Updates, California/Mexico Memorandum of Understanding Updates, Border 2020 Updates and Border Legislation. DTSC provided an update on the border inspection program and on the special operations with U.S Customs & Border Protection at the Calexico Port of Entry.

**Border Emergency Planning Meeting, City of San Diego, San Diego County:** On June 18, 2015, DTSC attended a Border Emergency Planning Meeting. Representatives from the County of San Diego Office of Emergency Services, County of San Diego Hazardous Materials, Tijuana Protección Civil and PROFEPA (Mexican EPA Enforcement) participated in the meeting. The following agenda items were discussed: July 10, 2015 Emergency Response Exercise in Mexicali, Structure of Border 2020, Tijuana/San Diego Sister City Plan, Bi-national Notification, Training Updates and Border-wide updates. The next Border Emergency Planning Meeting will be held in the City of Tijuana on October 14, 2015.

## 2. Surveillance And Enforcement

DTSC conducted coordinated inspections with CBP at the Otay Mesa Port of Entry (POE) in San Diego County and at the Calexico POE in Imperial County. DTSC conducts inspections at the Otay Mesa POE from Tuesday through Friday and at the Calexico East POE every Friday. DTSC inspected all northbound trucks importing hazardous waste and/or hazardous materials into California. DTSC inspections include review of all shipping documents, including manifests and waste profile, for the cargo. DTSC notifies PROFEPA of any rejected hazardous waste shipments.

In addition to the northbound truck stop inspections, DTSC began conducting southbound truck inspections with CBP at the CBP Otay Mesa POE. These coordinated inspections targeted trucks that may be illegally exporting hazardous waste into Mexico.

**U.S Customs & Border Protection/DTSC Special Operations, Calexico East Port of Entry, City of Calexico, Imperial County:** On April 8 and 9, 2015, DTSC participated with CBP on a Special Operations at the CBP, Calexico East Port of Entry, Imperial County. The Special Operations involved the joint inspection of southbound (exports) and northbound (imports) trucks deemed appropriate for inspection by CBP and DTSC. As a result of the inspections, a Summary of Violations was issued to Technologies Displays Americas, LLC, for failing to contain Cathode Ray Tube (CRT) glass in a container structurally sound, failing to label or clearly mark each container of CRT glass with the phrase "Universal Waste-CRT glass" and for failing to immediately contain all releases of CRT glass. Another Summary of Violations will be issued to Clover Technologies Group LLC, for failing to notify DTSC of its export of Universal Waste Electronic Devices.

**U.S Customs & Border Protection/DTSC Special Operations, Calexico East Port of Entry, City of Calexico, Imperial County:** On April 15-16, 2015, DTSC participated with CBP on a Special Operations at the CBP, Calexico East Port of Entry, Imperial County. The Special Operations involved the joint inspection of southbound (exports) and northbound (imports) trucks deemed appropriate for inspection by CBP and DTSC. As a result of the inspections, a Summary of Violations was issued to Guiro Trucking, transporter, for failure to make a hazardous waste determination, not completing a hazardous waste manifest, transporting hazardous waste without valid DTSC registration, causing a release of used oil onto the concrete ground and failure to comply with export requirements.

**U.S Customs & Border Protection/DTSC Special Operations, Calexico East Port of Entry, City of Calexico, Imperial County:** On April 22-23, 2015, DTSC participated with CBP on a Special Operations at the CBP, Calexico East Port of Entry, Imperial County. The Special Operations involved the joint inspection of southbound (exports) and northbound (imports) trucks deemed appropriate for inspection by CBP, DOT and DTSC. As a result of the inspections, a Summary of Violations was issued to Ibarra's Trucking DBA Alejandro Ibarra for causing the release of used oil onto the bed of the truck and concrete. The violation was corrected during the inspection and the scrap metal shipment was allowed to proceed south to its final destination.

DTSC assisted CBP on other potential hazardous waste activities as requested by CBP. Such assistance included inspecting trucks containing scrap debris (non-hazardous materials), hazardous materials and other non-regulated commodities. DTSC staff also assisted CBP inspectors in sampling and in emergency responses for hazardous waste at the ports of entry.

**San Diego County Contract**

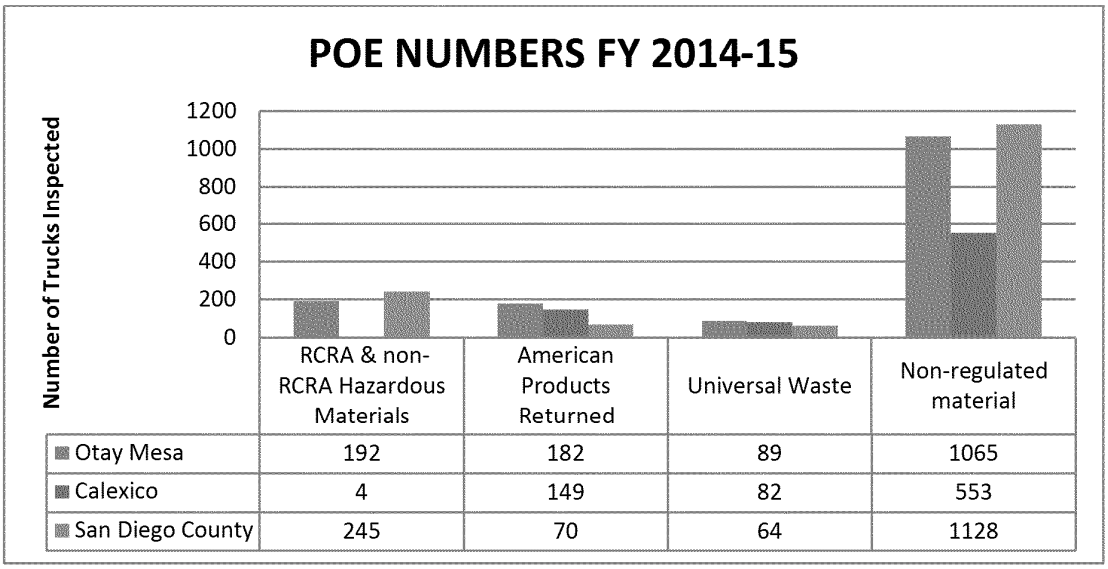
In April 2012, DTSC's renewed its contract with San Diego County for three years. This contract is funded by DTSC's RCRA grant. Two of the main activities under the contract scope of work are port-of-entry inspections at the Otay Mesa POE and providing training to the maquiladora industry. San Diego County provided two days of inspection at the Otay Mesa POE.

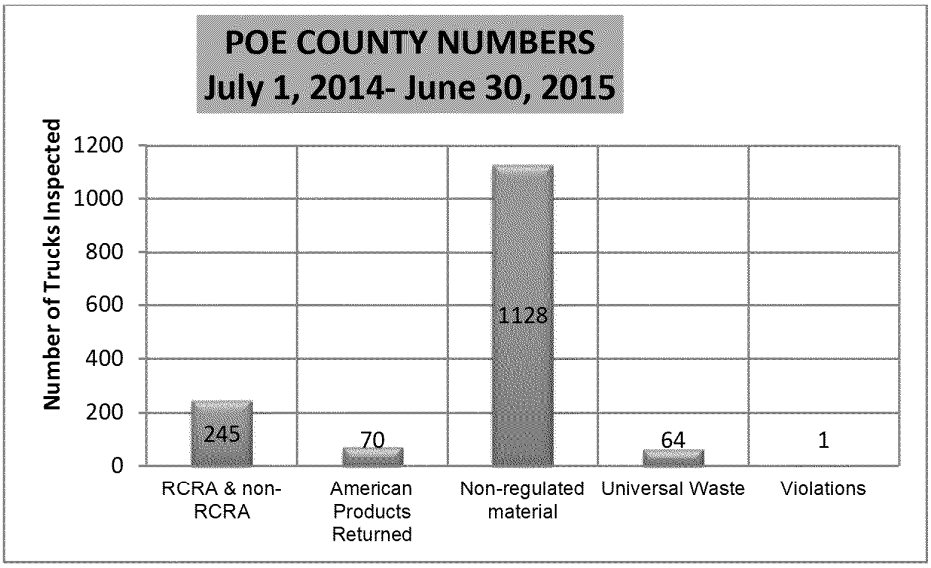
Between July 1 and June 30, 2015, San Diego County Department of Environmental Health and CBP conducted Border truck stop inspections on a weekly basis at the Otay Mesa POE.

Inspection results for both DTSC and San Diego County Department of Environmental Health are as follows:

***Mexican Border Truck Stops - Northbound***
**July 1, 2014 – June 30, 2015**

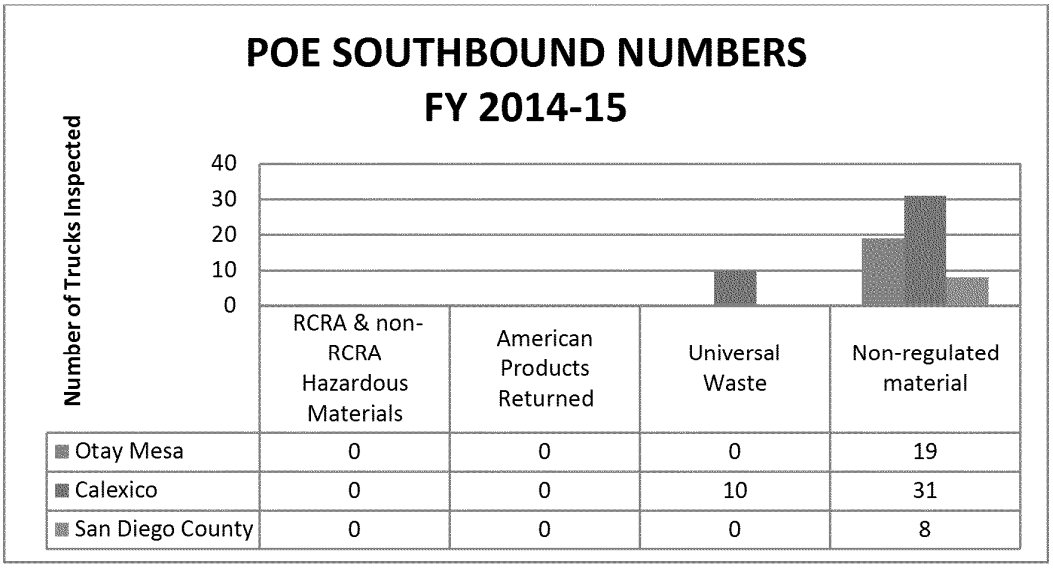
| | Number of Trucks Total (DTSC/San Diego) | Violations |
|---|---|---|
| RCRA and Non-RCRA | **441 (196/245)** | **7 (6/1)** |
| Non-Regulated Materials/ Non-Hazardous Waste | **2746 (1618/1128)** | **0 (0/0)** |
| American Products Returned | **401 (331/70)** | **0 (0/0)** |
| Universal Waste | **235 (171/64)** | **0 (0/0)** |
| **TOTAL** | **3823 (2316/1507)** | **7 (6/1)** |






**Southbound Inspections**
DTSC began conducting southbound truck stop inspections at the CBP Otay Mesa POE in April 2014. A limited number of these coordinated inspections were conducted because they required the assistance from CBP officers.

DTSC and CBP conducted special operations of southbound trucks during the months of August 2014, September 2014, and April 2015, at the CBP Calexico East Port of Entry. Inspection results at Otay Mesa and Calexico Ports Of Entry for ten days of inspections on southbound trucks, conducted on August 12 and 26, 2014; September 2 and 23, 2014, April 8 and 9, 2015; April 15 and 16, 2015; and April 22 and 23, 2015, are shown in the table below:




| | RCRA & non-RCRA Hazardous Materials | American Products Returned | Universal Waste | Non-regulated material |
|---|---|---|---|---|
| Otay Mesa | 0 | 0 | 0 | 19 |
| Calexico | 0 | 0 | 10 | 31 |
| San Diego County | 0 | 0 | 0 | 8 |

### 3. Compliance Assistance Training

DTSC conducted hazardous waste management training workshops in the cities of Mexicali and Ensenada, Mexico; and in the city of Calexico, Imperial County, California.

### 4. Compliance And Enforcement Capacity Building

DTSC identified and implemented activities to increase and improve compliance with environmental best practices and laws. DTSC continues to support the Arizona Department of Environmental Quality in the development of its border compliance and enforcement program.

### 5. Port Of Entry (Import and Export of Hazardous Waste)

During the reporting period, DTSC received 15 import notifications, and 30 export notifications for the Port of Entry (POE) program. Data from the notifications and reports are continuously entered into the POE database.

DTSC placed emphasis on tracking imported and exported wastes. DTSC reviewed import notices and checked the receiving California facilities to ensure that they were permitted to accept the wastes in question. Information identifying the types and volumes of wastes imported and exported, and the companies that import and export hazardous wastes, were retained in DTSC files.

## H. Initiatives

### 1. Environmental Justice

EERD has a major role in planning and implementing the strategies, activities, and tasks in DTSC's draft Environmental Justice Work Plan. The details are described in Section V. of this report.

### 2. Scrap Metal Recycling

DTSC's EERD and Office of Criminal Investigations (OCI) continued their work on a joint initiative to conduct inspections and investigate complaints at scrap metal recycling facilities statewide. About 14 sites have been inspected in Los Angeles, San Bernardino, Alameda, and Fresno Counties, including two of the large auto shredding facilities. All of these site inspections have resulted in Class I violations and have been or will be pursued criminally or civilly.

## I. NonRCRA Funded Activities

### 1. Electronic Waste (E-Waste)

#### a. Covered Electronic Device (CED) and Cathode Ray Tube (CRT) Recyclers

DTSC's inspection of electronic waste (e-waste) recyclers and dismantlers conducting treatment of e-waste is financed by a fee collected from the consumer when a CED is purchased in California. The fee is also used by CalRecycle to reimburse compliant e-waste recyclers and dismantlers for their activities (via the Covered Electronic Waste [CEW] Program).

DTSC is in its tenth year of inspecting electronic device and CRT material recyclers. The DTSC E-Waste team conducts these inspections. Between July 1, 2014 and June 30, 2015, DTSC conducted 56 inspections of e-waste recyclers. Three of the facilities were cited for Class I violations, 16 were cited for Class II violations, 29 were cited for Minor violations, and 22 did not have violations. During the reporting period, DTSC pursued enforcement against three companies cited for Class I violations.

During the past few years as the industry has matured and consolidated, the number of e-waste recyclers that require an annual inspection by DTSC has decreased by more than 50 percent, and now stands at 34.

#### b. E-Waste Collectors

DTSC continued to inspect e-waste collectors for compliance with universal waste management regulations. As offsite collectors of universal waste, the facilities fall within the regulatory purview of DTSC and are not part of the CUPA inspection universe.

Between July 1, 2014 and June 30, 2015, DTSC conducted 61 inspections of e-waste collectors. Three of the facilities had Class I violations, 16 had Class II violations, 35 had minor violations, and 19 had no violations. During this time period, DTSC pursued enforcement against two companies cited for Class I violations.

#### c. New Universal Waste Handler Inspection Initiative

DTSC began a new initiative to inspect universal waste lamp and battery handlers (UW handlers) around the state who are also collecting e-waste.

Over the past few years, DTSC has observed a disproportionate number of violations during complaint investigations of these facilities, and has determined that an inspection initiative of this industry subsector would be more proactive than continued response to complaints. Since UW handlers are neither inspected by the CUPA nor participating in the CalRecycle CEW Program, many of these companies have never been inspected and/or are not aware of regulatory requirements.

Between July 1, 2014 and June 30, 2015, DTSC inspected eight UW handlers as part of the new initiative. Of the facilities inspected, none had a Class I, one had a Class II violation, three had minor violations, three had no violations, and one has pending violations. None of the facilities had violations serious enough to warrant formal enforcement action.

Because the compliance rate of this industry subsector is better than anticipated, and because the E-Waste Team needs to refocus its efforts on inspecting as many collectors as possible, the team will not continue the universal waste handler inspection initiative in FY 2015-2016.

**d. Efforts to Reduce Future CRT Stockpiling and Abandonment**

In December 2014, DTSC prepared and issued an advisory to hundreds of e-waste handlers regarding their responsibility for the final disposition of CRTs and CRT glass they send out of state. The goal of the advisory was to prevent incidents such as the one at Dow Management in Arizona, where the owner stockpiled millions of pounds of California CRTs in three warehouses, then fled the country. Low-cost intermediate CRT processing facilities in Arizona remain an attractive option to California e-waste dismantlers/recyclers who submit reimbursement claims to CalRecycle for the material shortly after shipment out of state.

DTSC continues to meet quarterly with management and staff from CalRecycle, Arizona Department of Environmental Quality (ADEQ), and US EPA Region 9 to monitor the shipment of millions of pounds of California CRTs to Arizona each year. Coordination between DTSC and ADEQ remains critical as the need to keep CRT glass flowing to its final recycling destination is a goal of both BDOs, and the economic/market incentives for companies to stockpile CRTs continue to increase. There were no instances of CRT abandonment reported to DTSC in FY 2014-2015.

### 2. Used Oil

DTSC, in coordination with CalRecycle, continued to provide oversight of transporters, transfer stations, and recyclers of used oil in accordance with California's Hazardous Waste Control Law.

DTSC conducted 25 Used Oil inspections, as follows:

| USED OIL INSPECTIONS PLANNED AND CONDUCTED FY 2014/2015 | | | |
|---|---|---|---|
| **Inspection Type** | **Total Planned** | **Total Conducted** | **With Class I Violation Observed** |
| CEI – TSD and Generator – Used Oil Recycler | 5 | 3 | 0 |
| CEI – Transporter (Used Oil Contract) | 14 | 8 | 1 |
| CEI – Standardized Permit (Used Oil Contract) | 6 | 3 | 0 |
| FCI-TSD Used Oil and Used Oil Recycler (Used Oil Appropriations) | 4 | 7 | 1 |
| Non-Financial Record Review – Treatment, Storage and Disposal – Used Oil Recycler (Used Oil Contract) | 2 | 4 | 0 |
| **Totals** | 31 | 25 | 2 |

## J. DTSC Is the CUPA in Imperial And Trinity Counties

The Unified Program consolidates, coordinates and makes consistent the administrative requirements, permits, inspections and enforcement activities of six environmental and emergency response programs. CalEPA's role is to oversee the implementation of the Unified Program as a whole. The state agencies responsible for these programs set the standards for their program while local governments implement the standards. The Unified Program is implemented at the local level by 82 government agencies certified by the Secretary of CalEPA.

DTSC has been designated by CalEPA to implement the Unified Program (as a CUPA) in Imperial and Trinity Counties. The details are described in the Imperial and Trinity County CUPA Programs Implementation Summary, Appendix B.

# II. PERMITTING

## A. GPRA Permit and Permit Renewal Goals

The Federal Government Performance and Results Act (GPRA) Permit/Permit Renewal/Post-Closure/Closure verification goals are achieved when a hazardous waste facility meets "approved controls" in place. The approved controls are considered in place when the facility operates under a final, approved permit/permit renewal; closed with approved post-closure permit; or achieves clean closure verification. DTSC is the lead agency for approving these controls. Having these controls in place is a key element to ensuring that hazardous waste facilities in California operate safely and that human health and the environment are protected. This report provides a summary of California's GPRA achievements.

Each year, US EPA sets specific goals for the Grant and GPRA that Permitting is committed to meet. For Fiscal Year (FY) 2014-2015, Permitting and US EPA agreed to a goal of eight (8) Permit/Permit Renewal/Post-Closure/Closure Verifications. Permitting met four of the eight Verifications as outlined below:

| Company Name | US EPA ID Number | Type of Commitment | Date Completed |
|---|---|---|---|
| VEOLIA ES TECHNICAL SOLUTIONS LLC RICHMOND | CAT080014079 | Renewal | 10/7/2014 |
| NAVAL BASE CORONADO MIXED WASTE STORAGE FACILITY | CAR000019430 | Renewal | 2/2/2015 |
| CROSBY & OVERTON | CAD028409019 | Renewal | 8/22/2014 |
| ACME LANDFILL | CAD041835695 | Post-Closure Permit | 5/27/2015 |

## B. Multi-Year Strategy

The RCRA Grant and GPRA Project commitments to be completed during FY 2014-2018 were summarized in the Multi-Year Strategy Work Plan and submitted to US EPA Region 9 on September 20, 2011. A revised Multi-Year Strategy Workplan was submitted to US EPA on March 13, 2013. Revisions to the Multi-Year Strategy Work Plan for the following years are provided in March of each year. The current revision to the Multi-Year Strategy Work Plan is attached to this report as Appendix C.

The permits issued, permit modifications, and most closures will be accomplished by the DTSC Permitting Division. Other closures and corrective action activities will be accomplished by the DTSC Brownfields and Environmental Restoration Program (Cleanup Program). Every effort has been made to plan realistic targets in order to stay

on schedule with the RCRA Grant and GPRA goals.

The Multi-Year Strategy Work Plan submitted to US EPA in March 2013 shows targeted facilities for GPRA goals for three years (from 2015 to 2018) of the RCRA Grant cycle. It tracks and projects all facilities and sites for which DTSC has been delegated RCRA authority, including new permits, permit backlogs, permit renewals, post-closure permits, closures, and corrective action. The Multi-Year Strategy Work Plan also includes sites managed by both DTSC Cleanup Program and the Regional Water Quality Control Boards (RWQCBs). Any issues between DTSC and the RWQCBs affecting achievement of GPRA objectives and performance measures are coordinated by DTSC.

### C. Program Wide Activities

Some of the other activities which are absolutely essential for the effective implementation of an authorized RCRA program in the State of California include: program evaluation, program streamlining, regulation development, guidance development, and program training. Permitting Division completed the following six trainings:

Program Training

- Records Management
- General Facility Standards
- Closure and Post-Closure Plan Review
- Closure and Post-Closure Cost Estimate
- Landfill Design
- Tank Assessment

### D. Completed Permit Decisions

In addition to the Grant/GPRA permit goals, DTSC completed 2 state permits, 1 standardized permit renewal, 16 Class I modifications, 17 Class I* modifications requiring prior approval, 3 Class II permit modifications, 2 Class III permit modifications, and 50 Emergency Permits.

State Permits

- AGRITEC INT DBA CLEANTECH ENVIRONMENTAL INC – Completed 2/2/2015
- BAKERSFIELD TRANSFER INC – Completed 6/22/2015

Standardized Permit

- J&B REFINING DBA J&B ENTERPRISES – Completed 5/7/2015

# PROGRAM SELF-ASSESSMENT REPORTS

Class 1 Mods

- EVOQUA WATER TECHNOLOGIES LLC – Completed 7/2/2014
- SAN DIEGO GAS & ELECTRIC COMPANY– Completed 7/7/2014, 8/6/2014, 2/8/2015
- SQUARE D COMPANY – Completed 9/15/2014, 12/15/2014
- THE DOW CHEMICAL COMPANY – Completed 8/22/2014
- WEST COUNTY LANDFILL INC – Completed 8/19/2014
- BIG BLUE HILLS PESTICIDE CONT DISPOSAL – Completed 10/2/2014
- CALIFORNIA RESOURCES ELK HILLS LLC – Completed 5/5/2015
- JOHN SMITH LANDFILL – Completed 3/16/2015
- NAVAL AIR STATION NORTH ISLAND – Completed 4/27/2015
- SAN DIEGO GAS & ELECTRIC MIRAMAR – Completed 7/22/2014
- SANDIA NATIONAL LABORATORIES – Completed 4/23/2015
- THE CHEMOURS COMPANY FC LLC – Completed 2/26/2015
- CENTRAL WIRE INC – Completed 3/16/2015

Class 1* Mods

- CENTRAL WIRE INC – Completed 10/16/2014
- CHEMTRADE WEST LLC – Completed 1/20/2015
- CHEVRON EL SEGUNDO REFINERY – Completed 9/22/2014
- DAVID H FELL AND COMPANY INC – Completed 5/21/2015
- EVOQUA WATER TECHNOLOGIES LLC – Completed 11/5/2014
- HGST INC – Completed 3/9/2015
- HONEYWELL INTERNATIONAL INC FORMER BARON-BLAKESLEE – Completed 4/14/2015
- KINSBURSKY BROTHERS SUPPLY INC – Completed 5/20/2015
- NATIONAL AERONAUTICS AND SPACE ADMINISTRATION SANTA SUSANA FIELD LAB – Completed 1/8/2015
- RIVERBANK OIL TRANSFER, LLC – Completed 10/13/2014
- SAFETY-KLEEN OF CALIFORNIA INC – Completed 9/22/2014, 4/23/2015, 4/24/2015
- SANTA SUSANA FIELD LABORATORY RMHF – Completed 1/22/2015
- TFX AVIATION INC – Completed 12/23/2014
- THE CHEMOURS COMPANY FC LLC – Completed 6/25/2015
- TECHALLOY CO INC – Completed 10/16/2014

# PROGRAM SELF-ASSESSMENT REPORTS

Class 2 Mods

- EXIDE TECHNOLOGIES INC – Completed 11/18/2014
- DAVID H FELL AND COMPANY INC – Completed 8/19/2014
- QUEMETCO INC – Completed 4/8/2015

Class 3 Mods

- EDWARDS AIR FORCE BASE – Completed 12/19/2014
- UNITED TECHNOLOGIES CORP PRATT AND WHITNEY ROCKETDYNE SAN JOSE – Completed 5/4/2015

Emergency Permits

- BEALE AFB(3)
- NAVAL AIR STATION, NORTH ISLAND (2)
- MICHROM BIORESOURCES
- CORDIS CORPORATION
- AMGEN SF
- MT. SAN ANTONIO COLLEGE
- GILEAD SCIENCES (3)
- USDA
- UC DAVIS (3)
- VERTEX PHARMACEUTICALS (2)
- BIO-RAD LABORATORIES - HERCULES
- BIO-RAD LABORATORIES - RICHMOND
- JANSSEN RESEARCH AND DEVELOPMENT(2)
- GENENTECH
- NATUREX
- DART NEUROSCIENCE
- BNSF RAILWAY
- UNIVERSITY OF THE PACIFIC
- HARVEY MUDD COLLEGE
- ALFOREX SEEDS
- E&J GALLO WINERY
- LIFE TECHNOLOGIES
- SOUTHERN CALIFORNIA UNIVERSITY OF HEALTH SCIENCES
- ABBOTT DIABETES CARE
- GENENTECH, SO. SF
- SANDIA RESEARCH LABORATORIES
- LOCKHEED MARTIN SPACE SYSTEMS

## PROGRAM SELF-ASSESSMENT REPORTS

- UC DAVIS, SCHOOL OF MEDICINE
- MAC DERMID PRINTING SOLUTIONS
- MENTOR WORLDWIDE LLC
- NAVAL AIR STATION, NORTH ISLAND
- INTERMUNE
- DK DIXON(2)
- UC DAVIS CENTER FOR NEUROSCIENCE
- GENENTECH, VACAVILLE
- AMGEN SF LLC
- CEDAR SINAI MEDICAL CENTEE
- UNIVERSITY OF SAN FRANCISCO
- ALZA CORP.
- HEADWAY TECHNOLOGIES INC.



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# III. CORRECTIVE ACTION

## A. Government Performance and Results Act Environmental Indicators Report

The RCRA Corrective Action and the GPRA require facilities that have treated, stored or disposed of RCRA hazardous waste to investigate and cleanup hazardous releases, in accordance to state and federal requirements. California has 261 RCRA Corrective Action facilities tracked by US EPA as part of the RCRA 2020 Baseline list. The federal GPRA goals for Environmental Indicators include: (a) Human Exposure Under Control, (b) Contaminated Groundwater Migration Under Control, and (c) Remedy Construction Complete. The list of facilities meeting the GPRA goals for these indicators during the period from July 1, 2014 – June 30, 2015 are:

### Facilities meeting *Human Exposure Under Control* Environmental Indicator

| EPA ID | PROJECT NAME | COMP DATE | EVENT CODE |
|---|---|---|---|
| CAD028409019 | CROSBY & OVERTON - PLANT #1 | 8/20/2014 | CA725YE |
| CAD980585293 | INDUSTRIAL WASTE UTILIZATION INC | 10/15/2014 | CA725YE |

### Facilities meeting *Groundwater Migration Under Control* Environmental Indicator

| EPA ID | PROJECT NAME | COMP DATE | EVENT CODE |
|---|---|---|---|
| CAD028409019 | CROSBY & OVERTON - PLANT #1 | 8/20/2014 | CA750YE |
| CAD980585293 | INDUSTRIAL WASTE UTILIZATION INC | 9/2/2014 | CA750YE |
| CAT000617258 | GNB TECHNOLOGIES | 9/25/2014 | CA750YE |
| CAD053044053 | SAFETY-KLEEN OAKLAND | 6/30/2015 | CA750YE |
| CA1170090012 | UWS NAVY/FLEET & INDUST SUPL CTR-ALAMEDA | 6/30/2015 | CA750YE |

### Facilities meeting *Remedy Construction Complete* Environmental Indicator

| EPA ID | PROJECT NAME | COMP DATE | EVENT CODE |
|---|---|---|---|
| CAD028409019 | CROSBY & OVERTON - PLANT #1 | 8/20/2014 | CA550RC |
| CAD980585293 | INDUSTRIAL WASTE UTILIZATION INC | 9/2/2014 | CA550RC |
| CAD009531823 | BROWN AND BRYANT INC | 2/26/2015 | CA550RC |
| CAD093459485 | SAFETY-KLEEN REEDLEY | 6/15/2015 | CA550RC |
| CAD008344228 | CRITERION CATALYSTS & TECHNOLOGIES | 6/30/2015 | CA550RC |

| FY 2014-15 Environmental Indicators Summary | | |
|---|---|---|
| Human Exposure Under Control (HEC) = | CA725YE | 2 |
| Migration of Groundwater Under Control (GWC) = | CA750YE | 5 |
| Remedy Construction Complete (RCC) = | CA550RC | 5 |
| | **Grand Total** | **12** |

# IV. SAFER PRODUCTS AND WORKPLACES PROGRAM

### Green Chemistry Initiative and Implementation of Safer Consumer Products Regulations

With US EPA's support, DTSC continued making significant progress in the implementation of the Safer Consumer Product regulations. The most significant accomplishment during the year was the release in April, 2015 of the Priority Product Work Plan for 2015-1017. The Work Plan identifies seven consumer product categories from which the next Priority Products will be selected for regulation under DTSC's Safer Consumer Products regulations.

Three other important accomplishments were achieved which were key factors in DTSC's effectiveness: 1) extending the Interagency Personnel Act assignment of Eileen Sheehan from Region 9;
2) reaching agreement to extend for two years the 2012 Memorandum of Understanding (MOU) between US EPA and DTSC promoting the advancement and development and implementation of Green Chemistry; and
3) strengthening collaboration with EPA's Office of Research and Development (ORD) and EPA's chemicals program.

Eileen Sheehan's work has been invaluable to our efforts. Her support and work facilitating coordination and collaboration with US EPA staff and management in Region 9 and Headquarters' Office of Consumer Safety and Pollution Prevention (OCSPP) and ORD has contributed greatly to the identification of potential Priority Products and the development of guidance for conducting Alternatives Analyses. Especially valuable have been Eileen's success in connecting technical staff at DTSC with colleagues at US EPA working on methylene chloride in paint stripping and spray polyurethane foam issues. These efforts have helped DTSC staff understand the technical and procedural aspects of TSCA work plan chemical and risk assessments and how US EPA work complements and informs DTSC efforts. Additionally, Eileen was key in connecting DTSC staff with EPA's staff experts in technical disciplines such as computational toxicology, data systems dealing with chemical information sources, and data system management of confidential business information. Eileen's work to extend the MOU was also invaluable.

During this reporting period, agreement was reached to extend the Green Chemistry MOU. Extending this MOU will facilitate the continued coordination and collaboration between DTSC and US EPA on green chemistry efforts through the end of 2016.

Under the auspices of the MOU, DTSC further strengthened collaboration with both US EPA's Office of Research and Development (ORD) and US EPA's Office of Chemical Safety and P2 (OCSPP). Previously ORD was a less active participant in exchanges, and after DTSC and Region 9 reached out more pointedly, ORD began engaging and inviting DTSC's participation in predictive toxiciology meetings in North Carolina and at University of California, Davis. The result has been stronger staff capacity in chemical

analysis and chemical tool use. DTSC's management engagement with US EPA's OCSPP has continued to yield tangible benefits such as information exchange, regulatory updates and webinars on chemical assessment tools.

DTSC continued the Green Chemistry Initiative, primarily through efforts to implement the provisions of the Safer Consumer Products regulations, which were effective October 1, 2013. These regulations represent a new and progressive approach to promoting the design and use of consumer products that minimize potential harm to people and the environment by encouraging the use of safer alternatives. These efforts are consistent with US EPA's efforts to promote pollution prevention, hazardous waste source reduction and green chemistry practices.

DTSC conducted activities that encourage industry to make safer products that reduce exposures to hazardous chemicals by initiating the SCP regulations implementation. These efforts include the following tasks:

**A.** In April, 2015 DTSC finalized its Priority Product Work Plan for 2015-2017. The Priority Product Work Plan (Work Plan) identifies seven product categories from which Priority Products will be selected. The three year Work Plan outlines some of the considerations behind our product category selections and clearly identifies the policy priorities that will guide DTSC as we narrow the product categories and select potential Priority Products. These policy priorities focus on products that:

- Exhibit clear pathways for exposure to one or more Candidate Chemicals
- Contain chemicals that have been detected in biomonitoring studies
- Contain chemicals that have been observed in indoor air and dust studies
- May impact children or workers
- Contain chemicals that may adversely impact aquatic resource or that have been observed through water quality monitoring

DTSC initiated research efforts to collect and analyze information and data on potential Priority Products and will continue this work through 2015 and into 2016. DTSC continues to coordinate and collaborate with EPA to ensure relevant information is shared and that DTSC fully utilizes EPA research tools and resources as the Work Plan is implemented.

DTSC will continue to use research and stakeholder input to identify specific product-chemical combinations that warrant consideration as potential Priority Products. An update to the Work Plan will be issued one year before the expiration date[1].

Public workshops were held in September, 2014 to give the public an opportunity to hear DTSC explain the Work Plan and comment on the draft prior to finalization. DTSC will continue to engage all stakeholders for input on Work Plan implementation.

[1] http://www.dtsc.ca.gov/SCP/upload/FINAL-DRAFT-PPWP-140909.pdf

**B.** In September, 2014 DTSC launched the new California Safer Products Information Management System (CalSAFER). CalSAFER is an online tool which allows the public to provide comments and documents directly to DTSC via the web. CalSAFER initially launched its comments function in conjunction with the Priority Product Work Plan workshops and public comment period. DTSC received 344 comments on the Work Plan via CalSAFER. CalSAFER provides the public with an easy tool for submitting comments and documents, and allows users to search and see all comments submitted. Subsequent phases of CalSAFER will provide increased capability for commenting on formal rulemaking, petitioning the department to add/subtract chemicals and products from lists and submission of Alternatives Analyses. CalSAFER will promote transparency while still protecting trade secret information as necessary.

**C.** In October, 2014 DTSC updated the informational Candidate Chemicals List. This list includes chemicals that exhibit "a hazard trait and/or an environmental or toxicological endpoint" and appear on one or more of the 23 authoritative lists identified in the Safer Consumer Products regulations (Cal. Code Regs., tit. 22, § 69502.2(a)). In addition to individual chemicals, the informational list includes groups of chemicals. Some groups were taken from an authoritative list; in other cases, DTSC placed chemicals into well-recognized groups or created new groupings of closely related substances (e.g., parent chemicals and their metabolites; nitro polycyclic aromatic hydrocarbons (PAHs)).

This Informative List of Candidate Chemicals is a searchable database that allows the public and interested stakeholders to identify which chemicals DTSC considers potential candidates for regulation when used in a specific consumer product of concern. These chemical-product combinations are identified by DTSC as "Priority Products." Once a Priority Product is identified, their manufacturers (or responsible entities) are subject to the SCP regulations, including the requirement to conduct an Alternatives Analysis.

Importantly, the list of Candidate Chemicals is always changing. This is because the list points to other lists which, to varying degrees and at varying rates, change as the authoritative bodies who own the list make amendments. It would be very difficult for external stakeholders to continuously monitor these lists for changes. Thus, DTSC's updating of the Information Candidate Chemical list is very helpful for stakeholders who might reference the list to see if they are using a chemical of concern.

DTSC made significant strides to upgrade the functionality of the Candidate Chemical searchable database. The objectives of these efforts was to provide enhancements for external database users as well as on the back end for DTSC staff responsible for maintaining and updating the database. This Information Technology work will continue into Fall 2015 when the database will be fully operational.

**D.** DTSC continued to meet with interested stakeholders on the initial draft Priority Products that were announced on March 13, 2014. This ongoing dialogue resulted in a variety of changes to the scope of the original three draft Priority Products. The initial Priority Products list is the first set of product-chemical combinations to be named for consideration by DTSC to be regulated under the Safer Consumer Products regulations.
The Priority Products and Candidate Chemicals are now:

- Spray Polyurethane Foam (SPF) Systems containing unreacted MDI (methylene diphenyl diisocyanates)
- Children's Foam Padded Sleeping Products containing Tris (1,3-dichloro-2-propyl) phosphate or TDCPP and TCEP
- Paint and Varnish Strippers, and Surface Cleaners with methylene chloride

**E.** On October 16, 2014 DTSC provided an overview of the Safer Consumer Products regulations and program for the National Tribal Toxics Council. This was an opportunity to discuss with national Tribal leaders the efforts California is undertaking to protect consumers from toxics in consumer products.

**F.** DTSC convened the Green Ribbon Science Panel (GRSP) on October 20 and 21, 2014. The GRSP meeting focused on DTSC's draft Priority Product Work Plan and the methodologies and issues related to its development. Additionally, the GRSP addressed various aspects of the Alternatives Analysis Guidance development. The GRSP provides advice and is a resource to the DTSC Director and the California Environmental Policy Council on a variety of scientific and technical matters related to developing green chemistry and chemicals policy recommendations and implementation strategies.

**G.** DTSC continued development of Alternatives Analysis (AA) guidance, tools, training and information. The AA Guide encompasses two stages that correspond to the SCP regulatory requirements. The draft first stage guidance, developed during this grant reporting period, is targeted for release for public review and input in August, 2015. DTSC's AA Guide will be a comprehensive guide for conducting AA under the state's SCP regulatory requirement framework. Deliverables will include workshops/webinars on the guidance, published guidance documents, case studies, training materials and delivery. Materials developed for California's program will have utility within the "community of practice" conducting alternatives assessments under various authorities. DTSC has maintained coordination with various entities using and developing Alternatives Assessment models (US EPA's Design for Environment, Interstate Chemicals Clearinghouse, BizNGO, etc.).

**H.** Promoting Green Chemistry Education and Practice: DTSC continued to collaborate with higher education institutions to further the development of green chemistry based curriculums, education and practice to create a work force which understands green chemistry principles and develops useful tools.

# PROGRAM SELF-ASSESSMENT REPORTS

1. DTSC continued work with the UC Berkeley Center for Green Chemistry's Greener Solutions program by providing expertise and funding for the continued growth of the program. Deliverables included student/industry collaborative reports and students with increased knowledge and capabilities.

   In the 2014 fall semester two student groups worked on two separate projects. One group worked with DTSC and General Coatings Manufacturing Corp. to find replacements for methylene diphenyl diisocynate (MDI), a toxic ingredient in spray polyurethane foam insulation, which is one of our draft Priority Products. The other team focused on finding safer preservatives for household and personal care products, such as laundry detergents and face creams. Students worked with Beautycounter and Seventh Generation Inc. to identify possible safer substitutes. Beauty, Personal Care and Hygiene is a category in the draft Work Plan for 2015-2017.

   Project accomplishments may be found on-line at: http://bcgc.berkeley.edu/GS-2014

   US EPA's continued support of grant programs such as the Pollution Prevention Grant is a key element in developing and promoting green chemistry training within higher education; and building knowledge and capacity within industry in the green chemistry and alternatives assessment arenas.

2. DTSC staff conducted a training class, April 29, 2015, at the annual meeting of the Northern California Regional Chapter of the Society of Environmental Toxicology and Chemistry (SETAC). This class provided an overview of the SCP program and the approach DTSC is using to research and select Priority Products and in conducting Alternatives Analyses.



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# V. ENVIRONMENTAL JUSTICE

During the current reporting period, DTSC's Environmental Justice (EJ) Initiative focused on community based compliance and enforcement actions, reducing impacts from industries in disadvantaged communities, improving transparency and public outreach opportunities. DTSC achieved foundational accomplishments including the creation of the Assistant Director for Environmental Justice position, drafting a Supplemental Environmental Projects (SEP) Policy, and training on the use of CalEnviroScreen and other screening tools to prioritize actions benefiting disadvantaged communities.

**Background**

DTSC's EJ Initiative outlines DTSC's efforts to prioritize both RCRA and State enforcement and compliance actions in EJ communities, and is demonstrative of DTSC's compliance with California's environmental justice statutes and Title VI of the federal Civil Rights Act.

DTSC's former Enforcement and Emergency Response Program, now the Enforcement and Emergency Response Division, began the EJ Initiative in May 2007. The Initiative was formed to address three critical concerns articulated by EJ groups:

1. Reducing environmental harm and health risks through targeted enforcement actions of the "worst offenders" identified by EJ communities.
2. Establishing fair, consistent, and uniform enforcement.
3. Providing for early and meaningful public participation in DTSC's enforcement actions and performance.

In 2012, the Initiative expanded to a statewide focus and a departmental scope. The initiative is supported by one EJ Coordinator and interested staff that voluntarily contribute their limited available time to EJ projects. Participating staff are from DTSC's regional offices located in Sacramento, Berkeley, Clovis, Chatsworth, Cypress, San Diego, and El Centro. The Initiative utilizes a seven-step strategy to achieve its mission:

1. Reach out to and engage with community residents and advocacy groups.
2. Establish relationships to build public trust.
3. Learn community perspectives and issues through listening, bus tours, and task force participation.
4. Identify and prioritize environmental harms in EJ communities based on screening tools and community input.
5. Respond to community complaints in a timely and effective manner.
6. Build effective partnerships with other environmental regulatory agencies to comprehensively address environmental issues.
7. Provide transparency and early and meaningful public participation.

## COMPLETED ACTIONS

### A. Policy and Foundational Accomplishments

#### 1. DTSC's SEP Policy

DTSC finalized its SEP Policy on June 30, 2015. The SEPs policy is part of DTSC's commitment to environmental justice, as DTSC will prioritize the use of SEPs in California's most impacted and vulnerable communities, including California Native American Tribes.

DTSC conducted five public workshops in Fresno, Los Angeles, Brawley, Oakland, and Monterey County and provided a 45-day public comment period from March 2 through April 17, 2015. Approximately, 300 public comments were received. The Public Notice was posted on DTSC's website and emailed to approximately 2,000 contacts, including over 175 tribal contacts. An email address, SEP-Comment@dtsc.ca.gov, was created to receive public comments by email. Additionally, the Public Notice was featured on DTSC Newsfeed and Twitter.

#### 2. Created a DTSC Assistant Director for Environmental Justice Position- May 2015

DTSC established a new position for an Assistant Director for Environmental Justice that will lead the integration of EJ and Tribal affairs throughout DTSC.

- On May 14, 2015, Governor Edmund G. Brown Jr. announced the appointment of Ana Mascarenas as the Assistant Director for Environmental Justice at DTSC.

- California legislation permanently established the DTSC position of the Assistant Director for Environmental Justice. The Assistant Director shall perform the following duties, subject to the supervision of the Director: 1) Serve as ombudsperson and outreach coordinator for disadvantaged communities where hazardous materials and hazardous waste disposal facilities are located; 2) Provide information and assistance to communities on permitting, enforcement, and other department activities in the major languages spoken in those communities; and 3) where community health or epidemiological information that has been collected by the department or other parties to make that information available to communities.

3. **Compiled List of EJ Organizations and Agency EJ Contacts in California - October 2014**

   The list is comprised of 140 EJ organizations statewide, chairs of the major community task forces, and State agency EJ coordinators in support of multi-agency communication on EJ issues.

4. **Drafted DTSC's EJ Plan - July 2014**

   DTSC's Draft Environmental Justice Plan 2014 outlined goals, objectives, and actions aligned with DTSC's Strategic Plan, Fixing the Foundation work plans, 2004 CalEPA EJ Strategy, US EPA Plan EJ 2014, the California Communities Environmental Health Screening Tool (CalEnviroScreen), and recent legislation prioritizing enforcement in disadvantaged communities - AB1329. The goals, objectives and actions of the draft EJ Plan represent DTSC's commitment to environmental justice in California.

## B. Access to Information and Opportunities for Public Participation

1. **Developed Pilot Project for Public Comment on DTSC's Administrative Enforcement Actions – December 2014**

   DTSC's pilot project proposes to offer a 30-day public comment period on Administrative Orders. Staff conducted five community feedback workshops, in Los Angeles, Riverside/San Bernardino, Coachella/Imperial, Central Valley, and Oakland, and presented the pilot project on December 10, 2014 at DTSC's Public Meeting. The project launched in January 2015.

2. **Developed DTSC's EJ SharePoint Site**

   The site is designed for internal cross-program information sharing and includes contacts, news, a calendar of events, and an EJ information repository. The launch is scheduled for last half of calendar 2015.

## C. Compliance and Enforcement Actions

1. **Adopted CalEnviroScreen and Other Screening Tools to Prioritize Work in Disadvantaged Communities – July 2014**

   DTSC began prioritizing complaint investigations, inspections, cleanups, and enforcement activities based on two new screening tools: CalEnviroScreen and DTSC's Spatial Prioritization Geographic Information Tool. CalEPA's Office of Environmental Health Hazard Assessment developed CalEnviroScreen to help identify disadvantaged communities most burdened by pollution from multiple sources and most vulnerable to its effects.

DTSC's own screening tool for prioritizing impacted wells and facilities of interest is called Spatial Prioritization and Geographic Information Tool (SPGIT). The tool is currently being used in three specific project areas to help DTSC identify and address well contamination from halogenated solvents in burdened communities:

- Goshen in Tulare County
- Northern California Youth Correctional Facility in Stockton
- Jordan Downs in South Central Los Angeles

**2. Trained DTSC Staff on CalEnviroScreen Fundamentals – December 2014**

CalEnviroScreen training was provided to DTSC staff on December 8, 2014. Additional trainings will be provided to enforcement, permitting, and public participation staff in 2015. An additional six trainings will be provided in the summer of 2015 to enforcement, permitting, and cleanup program staff.

## D. Statewide Task Forces, Conferences, and Work Groups

DTSC is one of the founding government partners and sponsors of the IVAN (Identifying Violations Affecting Neighborhoods) Network, and continues to participate in the eight statewide community-led monthly task force meetings and IVAN reporting networks. During the current reporting period, DTSC participated in the development of statewide performance measures in collaboration with a US EPA community technical assistance grant. The community-led task forces include:

**Kings County IVAN Task Force**
DTSC participated in the launch of the Kings County IVAN on February 11, 2015. The launching of Kings-IVAN is the result of efforts by Valley Latino Environmental Advancement Project (LEAP) to address environmental justice issues in Kings County. A new and improved version of the existing IVAN platform will assist the community in reporting environmental concerns. The task force meets on the second Wednesday of the month. Four meetings were held during the reporting period. Further information can be found at the following website: http://ivan-kings.org/

**Bay View Hunters Point IVAN Task Force**
DTSC participated in the planning and development of the Bay View Hunters Point-IVAN Task Force, scheduled to launch in late July, 2015. The task force is hosted by Green Action and members of the California Environmental Justice Coalition. The web based reporting network is currently under development.

# PROGRAM SELF-ASSESSMENT REPORTS

**Kern Environmental Enforcement Network (KEEN) Task Force**
The task force meets on the first Tuesday of every month in Bakersfield. Twelve meetings were held during the reporting period. Further information can be found at the following website: http://www.kernreport.org/task-force.

**Fresno Environmental Reporting Network (FERN) Task Force**
The task force meets on the third Monday of every month in Fresno. Twelve meetings were held during the reporting period. Further information can be found at the following website: http://fresnoreport.org/task-force.

**Imperial County Environmental Justice Task Force (ICEJTF)**
The task force meets the last Thursday of every month. The DTSC CUPA Imperial and Trinity Branch Chief is co-chair of these meetings. Twelve meetings were held during reported period. Further information can be found at the following website: http://ivan-imperial.org/taskforce.

**East Coachella Valley Task Force**
The task force meets the third Wednesday of each month. Twelve meetings were held during the reporting period. Further information can be found at the following website: http://coachellaunincorporated.org/tag/environmental-justice-enforcement-taskforce-for-the-eastern-coachella-valley/

**Inland Valley Task Force**
The task force is hosted by the Center for Community Action and Environmental Justice, which serves San Bernardino and Riverside Counties and meets bi-monthly on the third Wednesday of every other month. Six meetings were held during the reporting period.

**Los Angeles Environmental Justice Network (LAEJN)**
The LAEJN meets the second Tuesday of each month. DTSC staff attended twelve monthly meetings of LAEJN during the reporting period.

**Los Angeles Community Environmental Enforcement Network (LACEEN)**.
The LACEEN Pilot project was launched on February 26, 2014. Further information can be found at the following website: http://laceen.org/
The project is the nation's first to incorporate real-time community fence-line air monitoring of a refinery and a website and task force to allow members of the public to file a complaint or report over an environmental, public health, or public safety violation or incident in their community. On December 8, 2014, LACEEN held a meeting to update members and the community on its project.

**Clean Green Healthy Schools Workgroup**
**DTSC Partnered with US EPA Region 9, July - December 2014**
DTSC co-founded with U.S.EPA Region 9 the Clean Green Healthy Schools Workgroup purposed to reduce toxic impacts to schools and children's health.



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- The Workgroup established a communication network between communities, schools, and governmental agencies listed as (healthyschools@dtsc.ca.gov).
- The 2014 pilot project established a specific focus on schools and childcare centers located within disadvantaged communities.
- The Clean Green Healthy Schools Workgroup will expand its focus from Southern California to statewide school issues in 2015.

**CalEPA Tribal Advisory Committee (TAC) Meetings, Sacramento - December 2014 - July 2015**
DTSC provided a briefing on its Tribal activities to the TAC and CalEPA, and assisted in Native American Day at the state capital. DTSC participated in the development of the CalEPA Tribal Policy and Consultation Protocol. DTSC also presented its SEP Policy to the TAC and included California Native Americans within the scope of the SEP Policy.

**California Environmental Justice Coalition (CEJC), Kettleman City - November 2014**
DTSC provided translation equipment and supported the founding conference of CEJC. Approximately, 200 people from urban, rural, and indigenous frontline communities, representing 50 grassroots organizations attended. Participants discussed recommended reforms to DTSC. The following link contains photos of the event: http://tracyperkins.org/2014/11/09/slideshow-california-environmental-justice-coalition-founding-conference/

In March 2015, DTSC hosted a CEJC stakeholder's meeting with DTSC's Director to discuss CEJC's recommended reforms for DTSC.

## E. DTSC's Statewide Environmental Justice Cooperative Agreement Grant (SEJCA) December 2014 – July 2015

DTSC was the only state government entity in California to be awarded the $160,000 grant from the US EPA. California was one of five states to receive the award. The SEJCA grant was purposed to build partnerships and state government collaboration with community groups on projects designed to address environmental and public health impacts in one of the most industrialized areas of Southern California – the Interstate 710 freeway corridor in southern Los Angeles County. The 710 corridor, a 23-mile artery that links the ports of Long Beach and Los Angeles with the rest of Southern California and the nation, is home to some of California's most vulnerable and underserved communities that are disproportionately burdened by environmental harms and risks.

A key goal of this grant was to support the creation of model projects that reduce environmental impacts in communities that could be replicated elsewhere. DTSC was also concerned with improving environmental conditions in the 710 corridor communities, identifying sources of contamination and pollution and

developing mitigation measures, informing and educating residents, and reducing health threats at local schools.

**SEJCA Grant Accomplishments:**
DTSC successfully concluded the grant on June 30, 2015. A total of 13 Community Partnership projects were launched and completed through the grant. The project activity during the current reporting period is listed below:

- Los Angeles Environmental Justice Network (LAEJN): Organized community-led bus tours along the 710 Corridor for local, state and federal government environmental decision-makers and legislative representatives to provide an opportunity to initiate discussions on the need and critical importance of community-agency partnerships and collaborations focused around improving environmental and public health conditions for those living with the impacts every day at home, school, work and play from ports, contaminated sites and other sources of toxic air pollution such as refineries. ($7,635)

- LAEJN: Groundwater Convening: LAEJN hosted a total of four convening's which consisted of representatives of local water organizations and state agencies to evaluate the information available on the quality of groundwater in the Los Angeles. Creating a long-term sustainable source of water for the Los Angeles area is a critical concern of LAEJN. Local groundwater provides nearly 40% of the total water needs for the LA area. Serious wide-spread groundwater contamination is impacting the availability of safe drinking water in many areas of the LA Basin. ($5,150)

- East Yard Communities for Environmental Justice (EYCEJ): Completed a "No Truck Idling" project which collected data and employed youth to identify local truck idling "hot spots" in the city of Commerce. The California Air Resources Board provided the "No Idling Signs" for the project. The City of Commerce agreed to install the signs at no cost and enforce the new state idling law. The project concluded with a "truckers appreciation" and no idling sign unveiling event in Commerce. The project will ultimately reduce pollution and improve local environmental health conditions. Commerce residents are impacted by the large amounts of diesel exhaust generated by approximately 47,000 diesel trucks being driven daily through the City and face increased cancer rates 2.5 times higher than that faced by other LA area residents. Reducing this risk is a primary environmental health concern for the City. ($5,000)

- EYCEJ: Organized "Useful Spots Not Empty Lots," a project to identify brownfields and potential beneficial uses for those empty spaces in the City of Commerce. The project's lead participants were local high school students who will conduct a survey using social media to identify needs/desired uses of empty lots in the community, mapped the locations and developed recommendations that can be used by the City to seek further grant funding

for cleanup and reuse and to facilitate development of a community-led revitalization strategy and broader long-term sustainable beneficial uses. ($5,000)

- California Safe Schools (CCS): Identified the use of artificial turf and crumb rubber in children's play areas and athletic fields as a critical concern for children's health. The use of these materials is increasing, particularly in environmental justice communities, and proposals for its use are increasing due to claims that the installation of these materials is drought resistant. CSS has completed some additional basic research on artificial turf and crumb rubber and the impacts on children's health and has prepared a report framing the critical issues, problems and areas needing further research and testing. ($2,835.33).

# VI. PUBLIC PARTICIPATION

Public engagement serves as an essential component in DTSC's processes and practices. Maintaining public involvement throughout the decision-making process helps to build public trust and confidence. DTSC works to ensure that the public is involved in DTSC's decision-making process and public input is considered before any operating permit, permit modification, closure verification, or post-closure permit is approved or denied. In order to achieve this goal, public engagement activities are conducted by DTSC to encourage two-way dialogue, and promote transparency.

During the reporting period, community engagement work included, developing and conducting community surveys in multiple languages, coordinating public meetings and forums, conducting interviews, developing, distributing, and posting public notices, updates, and fact sheets, maintaining events calendars, and updating mailing lists. Much of the public participation work reported during this period began earlier than FY 2014-2015. The activities reported are for decisions or actions finalized during this reporting period and may not coincide with the reporting period.

**Public Participation Activities**

**A. Permitting**

**1. Permit Renewals**

**Crosby and Overton, Long Beach, Los Angeles County**
Drafted and finalized the Community Notice and Public Notice; and made arrangements for translation of the documents. In June 2014, staff distributed Community Update/Fact Sheet announcing public comment period from June 4, 2014 – July 21, 2014. The final permit decision notice was distributed on August 22, 2014.

**Naval Base Coronado Mixed Waste Storage Facility, San Diego, San Diego County**
Staff surveyed the community in March and April of 2014, for the Permit Renewal of the Mixed Waste Storage Facility. The Community Update/Fact Sheet announcing public comment period (September 22, 2014 – November 7, 2014) was distributed in September 2014; and a Public Hearing was held in October 2014. The final permit decision notice was dated December 31, 2014.

**Veolia Environmental Services Technical Solutions (Onyx Environmental LLC.), Richmond, Contra Costa County**
The final Community Notice, Public Notice, and the radio ad were sent out, published, and broadcast in English and Spanish during February 2014. A second public comment period was conducted June 27- August 11, 2014 for the Veolia permit renewal. The Community Notice and Public Notice were advertised; the fact sheets were mailed to the community; the notices were again published in Spanish and English; and the radio

ads ran again in June 2014. The final permit decision notice was distributed on September 8, 2014.

**Acme Landfill, Martinez, Contra Costa County**
The public comment period was August 6 through September 22, 2014; and final permit decision notice was distributed on May 27, 2015.

**2. Emergency Permits**
Staff developed notices for each of the 50 Emergency Permits DTSC issued, including the effective dates of the permit, and published the notices in local newspapers.

**B. Corrective Action**

The following activities were conducted in conjunction with project milestones and release of documents.

**Beckman Coulter, Fullerton, Orange County**
The final Community Profile was completed in November 2014. Staff distributed a Community Update/Fact Sheet announcing public comment period (November 21, 2014-January 9, 2015) on the Proposed Cleanup Plan in November 2014.

**C. Safer Consumer Products**

Public participation staff helped to facilitate the workshops in September 2014 for the Safer Consumer Products Priority Product Work Plan, and managed related press releases and media inquiries.

**D. Exide Technologies, Vernon, Los Angeles County**

DTSC conducted significant community engagement activities in conjunction with the permitting, enforcement, and cleanup work at the Exide facility and surrounding areas. To prepare for community outreach, DTSC staff developed a customized outreach strategy, communications materials, and a soil remediation activities process for the remediation of homes in two assessment areas. During the reporting period, DTSC conducted community engagement activities that were essential to the projects, as follows.

**July-September 2014**

- DTSC staff reached out to the 39 properties (homeowners and tenants) via phone and door-to-door contact to provide soil test results to property owners in both assessment areas and discuss next steps. DTSC staff worked with two property owners/tenants to secure access for soil remediation activities. Soil removal activities took place at two properties within one of the assessment areas. In August and September 2014, letters were mailed to more than 200 property owners in two assessment areas encouraging them to have the soil at their properties sampled.

- DTSC Public Participation Specialist (PPS) assisted DTSC project team to strategize and prepare for community workshops and community meetings; and at meeting venue. PPS followed up with resident requests for DTSC assistance. PPS assisted with resident request for DTSC soil sampling of private homes. PPS assisted community activists with questions and protocols on other nearby facilities (Quemetco).

**September 2014**
DTSC prepared a Community Notice, in English and Spanish, announcing the Draft Interim Measures Work Plan and the Public Comment Period and distributed via hard copy mailing and posted electronically to the DTSC website. A Public Notice announcing the Draft Interim Measures Work Plan in the La Opinion and the Los Angeles Times newspapers.

**November 2014**
DTSC prepared a Community Notice, in English and Spanish, announcing the Approval of the Interim Measures Work Plan and distributed via hard copy mailing and posted electronically to the DTSC website.

**December 2014 - June 2015**
DTSC staff contacted property owners in the two initial assessment areas and scheduled appointments to discuss their soil test results and the soil removal process. In January and May 2015, letters were mailed to more than 40 property owners in two assessment areas encouraging them to have the soil at their properties sampled. DTSC staff worked with157 property owners/tenants to secure access for soil remediation activities. As of June 30, soil removal activities have been completed at 109 residential properties.

**March 2015**
DTSC distributed a meeting announcement to park patrons and immediate neighbors of Parque De Los Sueños and posted to the DTSC website; and hosted a public meeting, on March 18, 2015, with park patrons and immediate neighbors of Parque De Los Sueños to discuss the soil sampling results and next steps. About 30 community members attended.

**April 2015**
- DTSC prepared and distributed the following:
  - Community Updates, in English and Spanish, announcing the Closure of the Exide Technologies. The documents were distributed via hard copy to the Exide project mailing list (more than 2700 people), and email list (more than 200 people), deposited in the information repositories, posted electronically on the DTSC website, and distributed via door-to-door canvassing within the two initial assessment areas.
  - Meeting announcement for the Exide Technologies closure and to discuss the next steps. The meeting announcement was mailed to the Exide project mailing

list and email list, deposited in the information repositories, and posted electronically on the DTSC website.
  - A notice of a 30-Day public comment period and public scoping meeting for the Notice of Preparation for the Environmental Impact Report was mailed to the Exide project mailing and email lists, deposited in the information repositories, and posted electronically on the DTSC website.
- DTSC hosted a public meeting to announce the closure of Exide Technologies and to discuss the next steps. The meeting was held at Resurrection Catholic Church on April 9, 2015. More than 90 individuals attended.

**May 2015**

- Soil sampling results were mailed to 146 residential property owners, parks, churches, and private schools as part of the expanded sampling plan.
- DTSC prepared and distributed Community Updates, in English and Spanish, announcing the Formation of the Advisory Group, and the Public Scoping Meeting. The documents were distributed via hard copy to the Exide project mailing and email lists, deposited in the information repositories, posted electronically on the DTSC website, and distributed via door to door canvassing within the two initial assessment areas.
- DTSC distributed a meeting announcement for the Exide Technologies Advisory Group. The meeting announcement was mailed to the Exide project mailing list and email list, deposited in the information repositories, and posted electronically on the DTSC website.
- DTSC and South Coast Air Quality Management District (SCAQMD) announced the formation of an Exide Technologies Advisory Group. The first meeting focused on the formation and membership of the Advisory Group was held on May 28, 2015 at Resurrection Catholic Church in Boyle Heights. The meeting was open to the public; approximately 85 individuals attended.

**June 2015**

- DTSC and SCAQMD held the first Exide Technologies Advisory Group Meeting on June 11, 2015 at Maywood Academy High School in Maywood. The meeting focused on the status of the Technical Advisor and the draft Closure Plan; approximately 70 individuals attended.
- DTSC held a public scoping meeting for the Notice of Preparation for the Environmental Impact Report for the Closure of Exide Technologies on June 18, 2015 at Maywood City Hall. Verbal and written comments were received; approximately 65 individuals attended.

# VII. INFORMATION MANAGEMENT

## A. Handler Notification and RCRAInfo

RCRAInfo is the federally recognized database of record for both recording Handler information and for sharing the subset of non-protected information with US EPA's public websites ECHO and Envirofacts. Effective June 1, 2015, DTSC began processing incoming RCRA Handler Notifications from federally-defined handlers of hazardous waste. DTSC became the official "Implementer of Record" for the national RCRAInfo database.

**Handler Notification Activities**
During the reporting period, 625 Handler Notifications were processed as shown in the table below.

- Between July 1, 2014 and May 31, 2015, 575 permanent and provisional EPA ID numbers were issued by DTSC's contractor Tetra Tech, Inc.
- Between June 1 and June 30, 2015, DTSC issued 50 permanent and provisional EPA ID numbers.

| California Handler Notifications 2014-2015 | | | |
|---|---|---|---|
| **Notifications (ID Numbers) Issued** | **Permanent** | **Provisional** | **Total** |
| **Contractor- Tetra Tech Issued** | 422 | 153 | 575 |
| **DTSC Issued** | 23 | 27 | 50 |
| **Total** | 445 | 180 | 625 |

## B. Data Uploads to RCRAInfo

DTSC's EnviroStor Data Management System regularly reports enforcement, permitting and corrective action outputs, including the Federal Government Performance and Results Act accomplishments, to RCRAInfo to ensure accurate, timely, and complete tracking and reporting of RCRA core measures. DTSC continues to transferring data to RCRAInfo by exporting data in the approved XML format. Data for Enforcement, Corrective Action and Permitting is reported on a monthly basis on approximately the 15th of each month. Quality assurance/quality control (QA/QC) was conducted after each successful upload to ensure that the data was successfully transferred. Below are the dates of each successful upload which include special requests for additional uploads beyond the regularly scheduled monthly process.

| PERMITTING | CORRECTIVE ACTION | ENFORCEMENT |
|---|---|---|
| 7/1/2014 | 7/15/2014 | 7/15/2014 |
| 8/15/2014 | 8/15/2014 | 8/15/2014 |
| 9/15/2014 | 9/15/2014 | 9/15/2014 |
| 9/30/2014 | 9/30/2014 | 9/30/2014 |
| 10/15/2014 | 10/15/2014 | 10/15/2014 |
| 11/15/2014 | 11/17/2014 | 11/17/2014 |
| 12/15/2014 | 12/15/2014 | 12/15/2014 |
| 1/15/2015 | 1/15/2015 | 1/15/2015 |
| 2/13/2015 | 2/17/2015 | 2/17/2015 |
| 3/13/2015 | 3/16/2015 | 3/16/2015 |
| 4/17/2015 | 4/15/2015 | 4/15/2015 |
| 5/15/2015 | 5/15/2015 | 5/15/2015 |
| 6/15/2015 | 6/15/2015 | 6/15/2015 |
| 7/15/2015 | 7/15/2015 | 7/15/2015 |

**Permitting – Data Cleanup**
The Data Management Unit continues to work with the Permitting Division staff to improve the data quality in the EnviroStor system, which in turns improves the accuracy of the permitting universe data in RCRAInfo.

**Financial Assurance XML Data Upload**
Due to limited resources and competing priorities, DTSC has not been able to work on developing the XML data upload process for the Financial Assurance module. However, DTSC has completed modifications to the EnviroStor system to better align the system with new business processes for capturing more accurate cost estimate data.

## C. Biennial Report

The Biennial Report (BR) serves to gather information about the generation, transportation and final disposition of hazardous waste in the state. The resulting BR is maintained and managed to evaluate and characterize RCRA hazardous waste management, generation, treatment, storage, disposal, minimization, and waste management capacity. DTSC established a BR process that ensures that the BR data submitted to DTSC by applicable generators is keyed in and uploaded into US EPA's database in an efficient and timely manner.

For the period July 1, 2014 to June 30, 2015, the following procedures were conducted to process the BR. The status is based on work done on the data from the last reporting cycle, 2013 BR Cycle:

1. Submitted the initial data extract electronically to US EPA Region 9 before July 7, 2014. Once data was loaded into RCRAInfo, DTSC continued data quality assurance efforts and submitted all revised data to US EPA Region 9 prior to final submission by October 1 of the submitting year.

2. Performed QA/QC on data received to identify discrepancies in reported quantities of wastes managed, received, shipped and generated by comparing to previous years' data. Discrepancies were investigated, verified, and/or corrected.

3. Continued data quality assurance efforts by using the advanced edit report, verification report, shipper/receiver reports, and other national quality assurance reports available in RCRAInfo or the BRS State software. DTSC completed these data quality analyses and corrected the data before October 2014.

4. Identified all large quantity generators (LQGs) and treatment, storage, and disposal facilities (TSDFs), which were listed as active in RCRAInfo but did not submit a Biennial Report during the survey cycle. DTSC performed analysis on this list to determine each non-reporting LQG and TSDF. Non-reporters were notified to submit the Biennial Report. Follow up and reporting was ongoing throughout the period.



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## VIII. GRANT MANAGEMENT

### A. DTSC- Region 9 Coordination Meetings

DTSC and US EPA Region 9 Managers reestablished quarterly meetings during the reporting period. Meetings were held in January and May, 2015, and the next meeting is planned to be held in September. The increased level of communication and collaboration are important to both DTSC and US EPA for effective implementation of the RCRA program.

DTSC grant management and program staff continued monthly update meetings during the reporting period.

### B. Grant Application and Work Plan Revisions

DTSC began developing potential changes to the 2015-2017 work plan. Discussion on the proposed revised work plan elements is planned for the September quarterly meeting.

### C. Quality Assurance Planning

DTSC staff received comments on the draft Quality Assurance Program Plan (QAPrP) from US EPA Region 9 and worked on revisions to address the reviewer's concerns. DTSC plans to continue working with the reviewer(s) to revise the draft and expects to submit a final QAPrP by the end of 2015.

## IX. AUTHORIZATION

DTSC continued development of an application to US EPA for authorization of the Universal Waste Rule. The application package included comparisons of federal regulations to the state regulations as required by EPA Checklists. DTSC staff completed the review of the checklists and submitted the application package to the California Attorney General's Office for review in October 2014. However, their review was delayed until August 2015. After the Attorney General's Office review is completed, DTSC staff will review the comments provided by the Attorney General and revise the package as necessary. DTSC expects to submit the application to US EPA by February 2016 for authorization of the Universal Waste Rule.

## RCRA Funded Facilities – Formal Enforcement

**Acme Fill Corporation, City of Martinez, Contra Costa County: CAD041835695.** On July 25, 2014, DTSC entered into a Consent Order with Acme Fill Corporation (Acme) settling violations discovered during the May 26, 2011 inspection. The violations include: failure to perform an annual leak test on tank treatment system piping, failure to provide tank equipment secondary containment, storing hazardous waste over 90 days, failure to maintain integrity of the landfill cover, and failure to maintain adequate post closure financial assurance. Acme has agreed to pay a penalty of $40,000, in four $10,000 payments.

**Acme Fill Corporation, City of Martinez, Contra Costa County: CAD041835695.** On March 23, 2015, DTSC entered into a Consent Order with Acme Fill Corporation (Acme) settling the violation discovered during the September 9, 2014 inspection. The violation was cited for the accumulation of hazardous waste (filter cake) over ninety day's onsite without a permit. The filter cake was stored at the leachate treatment plant beyond the 90 day accumulation timeframe. Acme agreed to pay a penalty of $3,093.57 which included $469.92 for administrative cost incurred by the Department.

**All County Environmental & Restoration, Inc., City Of Anaheim, Orange County: CAL000317239.** On August 22, 2014, DTSC entered into a Consent Order with All County Environmental & Restoration covering violations discovered during a records review of the company. The Hazardous Waste Tracking System indicated that the facility had transported hazardous wastes from 2010 until 2013 without obtaining a hazardous waste hauler registration from DTSC. A Summary of Violations and an inspection report was mailed to the facility on July 17, 2014. The company is a general contractor specializing in repairs, custom remodels, immediate flood or fire damages, asbestos/lead abatement, and mold remediation serving Southern California. The Consent Order assessed a total amount of $10,500 that was paid in full as of September 14, 2014.

**American Abrasive Products, City of Industry, Los Angeles County: No EPA ID Number (Complaint).** On April 6, 2015, DTSC entered into a Consent Order with American Abrasive Products to settle a violation cited as a result of a November 28, 2011 complaint investigation. American Abrasive was cited for offering glass beads for sale, to be used with pressure, suction, or wet or dry blasting equipment, that contained more than 75 parts per million of arsenic. The company stopped the sale of the disputed glass beads in California, and is not subject to a penalty unless the Department receives new facts associated with the allegations.

**Asbury Environmental Services, City of Compton, Los Angeles County: CAD028277036.** On March 6, 2015, DTSC entered into a Consent Order with Asbury Environmental Services (Asbury) settling a violation discovered on an investigation that started on August 30, 2013. Asbury was cited for storage in excess of the ten day transfer facility exemption. The company agreed to pay a penalty of $7,000.



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**Coachella Valley Water District Well 6806 (CVWD), City of Thermal, Riverside County: CAL000300636.** On February 2, 2015, DTSC entered into a Consent Order with CVWD resolving violations found during a self-disclosure inspection June 26, 2014. CVWD agreed to pay a $9,405 penalty and has extensively re-engineered its hazardous waste handling operations. According to CVWD, a design flaw in its water treatment plant led to the violations of sending hazardous waste (arsenic contaminated waste water) to a facility not authorized to receive it. CVWD is a drinking water treatment plant which provides drinking water to those living in the Coachella Valley.

**ECS Refining, City Of Santa Clara, Santa Clara County: CAD003963592**. On April 8, 2015, DTSC entered into a Consent Order with ECS Refining, settling 26 violations from inspections conducted in 2009 and 2011. ECS was granted a Standardized Permit in 2009. The permit violations included: unauthorized storage and treatment of hazardous waste; uncertified tanks; failure to repair a leaking unit; incorrect manifests; failure to notify DTSC of the removal and disposal of tanks; failure to conduct weekly inspections of permitted units; failure to provide operating records to DTSC in a timely manner; and exceeding the quantity limit for treatment of hazardous waste on at least 10 different days. ECS also committed several electronic-waste violations, including: containers used to hold electronic devices were not structurally sound; not dismantling devices over adequate containment; personnel training deficiencies; and failure to comply with federal notification requirements for cathode ray tube (CRT) glass exports to Canada. The company paid a penalty of $218,780.

**Evoqua Water Technologies, LLC, City of Los Angeles, Los Angeles County: CAD097030993.** On August 7, 2014, DTSC entered into a Consent Order with Evoqua Water Technologies (Evoqua) settling violations discovered during a May 20, 2013 inspection of this off-site treatment and storage facility. As a result of the inspection, Evoqua was cited for the following violations: failure to develop a procedure for assessing the condition of its tanks; failure to record the location of each hazardous waste within the site and the quantity at each location; and storage and treatment in an unauthorized unit. Evoqua has agreed to pay a penalty of $11,000.

**Exide Technologies, Inc., City of Vernon, Los Angeles County: CAD097854541.** On November 21, 2014, DTSC entered into a Consent Order with Exide Technologies (Exide) settling violations found on inspections conducted on August 16, 2013, April 29, 2014, and August 5, 2014. As a result of those inspections, Exide was cited for the following violations: several counts of failure to minimize a release; failure to have a functioning leak detection system; installation and use of a rotary dryer, an unauthorized treatment unit; failure to inspect and record monitoring data for the containment building and surrounding areas; failure to inspect waste handling areas; failure to maintain the primary barrier of the containment building to be free of significant cracks, gaps, corrosion, or other deterioration; storage of hazardous waste in leaking containers; failure to transfer hazardous waste from a container in bad condition into a container in good condition; and storage of hazardous waste in open containers. The penalty was

assessed at $1,286,374; Exide paid a post-petition penalty payment of $526,345.

**Hazardous Material Transportation, Inc., City of San Diego, San Diego County: CAR000183822 (Complaint).** On June 29, 2015, DTSC entered into a Consent Order with Hazardous Material Transportation (HMT) settling violations observed during a truck stop inspection at the U.S Customs & Border Protection, Otay Mesa Port of Entry. HMT agreed to a penalty of $4,000 dollars. HMT was cited for accepting and transporting a container of hazardous waste that was not designed or constructed to prevent a release, and that was leaking. HMT is a registered hazardous waste transporter.

**Kroeker Environmental Services, Inc., City of Fresno, Fresno County: CAR000155317.** On July 17, 2014, DTSC entered into a Consent Order with Kroeker Environmental Services settling violations discovered on a November 19, 2013 inspection of this registered hazardous waste transporter. Kroeker was cited for storage of hazardous waste in excess of the 10-day transfer facility exemption. The company agreed to pay a penalty of $4,248.

**Neutrogena, City of Los Angeles, Los Angeles County: CAR000054031.** On December 12, 2014, a Stipulation for Entry of Final Judgment on Consent was filed by the California Office of the Attorney General on behalf of DTSC requiring Neutrogena to pay $416,423 to DTSC. The violations related to this settlement were identified during a DTSC inspection on March 17, 2010. As part of the settlement, Neutrogena is able to reduce the civil penalties by up to $5,000 by sending employees to the California Compliance School to receive training on the HWCL requirements for handling hazardous waste.

**Safety Kleen Systems, City of Sacramento, Sacramento County: CA0000084517.** On August 7, 2014, DTSC entered into a Consent Order with Safety Kleen Systems (Safety Kleen) settling violations discovered during a September 27 - 28, 2012 inspection. The violations include failure to perform daily tank inspections, failure to obtain a tank assessment, and failure to store incompatible wastes separately. Safety Kleen agreed to pay a penalty of $49,238.70.

**Samex Environmental Services, City of San Diego, San Diego County: CAR000241604 (Complaint).** On June 29, 2015, DTSC entered into a Consent Order with Samex Environmental Services (Samex) settling violations observed during a truck stop inspection at the U.S Customs & Border Protection, Otay Mesa Port of Entry. Samex agreed to a penalty of $2,000 dollars. Samex was cited for for failing to properly package a roll-off container of filter-cake, a hazardous waste that it imported into the United States. Samex is the Importer of Record for imports of hazardous waste.

**Schaffer Grinding Company, Inc., City of Santa Fe Springs, Los Angeles County: CAL000292826 (Complaint).** On March 9, 2015, DTSC entered into a Consent Order with Schaffer Grinding settling violations observed during a complaint investigation.

Schaffer Grinding agreed to the penalty and mailed DTSC a check in the amount of $160,000.00 dollars. Schaffer Grinding was cited for shipping hazardous waste to unauthorized facility in Mexico, transporting hazardous waste without authorization, accepting and storing hazardous waste without a permit.

**Synergy Enterprises, Inc., City of Hayward, Alameda County: CAL000291177. (Complaint).** On July 16, 2014, DTSC and Synergy Enterprises (a registered transporter hauling primarily asbestos wastes) entered into a Stipulation for Entry of Final Judgment settling violations observed during a July 26, 2012, complaint investigation of this facility. Violations involved: unauthorized storage (957 instances of 10-day exempt transfer station exceedances for 2010, 2011 and 2012) and unlabeled containers. The penalty paid was $110,000.

**Non-RCRA Funded Facilities – Formal Enforcement**

**3R International Group, City of Pomona, Los Angeles County: CAL000347305.** On June 9, 2015, DTSC issued an Enforcement Order to 3R International (3R) and the facility operator William Lang for violations DTSC identified during a December 11, 2013, records review of CRT shipments Mr. Lang initiated for 3R. The violations include: failure to ensure that 32,840 pounds of CRTs sent to Dow Management LLC in Yuma, Arizona were recycled through reclamation at a CRT glass manufacturer or leas smelter. The penalty was $21,630.00.

**Advanced Cleanup Technologies Inc., City of Carson, Los Angeles County: CAD983620402 (Complaint).** On May 5, 2015, DTSC was granted Judgment to Collect Administrative Penalties by the Superior Court of the State of California for the County of Los Angeles. The Judgment settles violations discovered during the October 15, 2013 complaint investigation. The violations included: storing hazardous waste without a permit or authorization from the DTSC and transporting hazardous waste without a valid hazardous waste transporter registration. It is ordered that the DTSC shall recover from ACTI the sum of $195,000.00. On July 28, 2014, DTSC entered into a Consent Order (CO) with Advanced Cleanup Technologies Inc. (ACTI) resolving violations observed during a complaint investigation. ACTI agreed to a penalty of $195,000. ACTI was cited for storing and transporting hazardous waste without a permit or authorization from DTSC.

**Advanced Cleanup Technologies, Inc., City of National City, San Diego County: CAL000336810. (Complaint).** On March 4, 2015, DTSC was granted Judgment to Collect Administrative Penalties by the Superior Court of the State of California for the County of San Diego. The Judgment settles violations discovered during the August 4, 2011 complaint investigation. The violation was: storing hazardous waste without a permit or authorization from the DTSC. It is ordered that the DTSC shall recover from ACTI the sum of $28,000.00.

**Black Star Oil Company, Inc., City of Los Angeles, Los Angeles County: CAL912823785.** On September 18, 2014, DTSC entered into a Consent Order with Black Star Oil Company (Black Star) settling a violation that was discovered in a December 21, 2012 inspection of this registered transporter. Black Star was cited for failure to complete, sign, and date the transporter section of the manifest acknowledging acceptance of hazardous waste from the generator. The company agreed to pay a penalty of $3,000.

**Crystal Blue Environmental, City of Elverta, Sacramento County: CAL000375092.** On September 18, 2014, DTSC entered into a Consent Order with Crystal Blue Environmental settling violations discovered during inspections conducted on October 22 and December 23, 2013. The violations include: not having possession of the transporter registration while transporting hazardous waste; failure to notify DTSC of its intent to use the consolidated manifesting procedure when it applied for renewal of its hazardous waste transporter registration for years 2013/2014; failure to report before March 1st of each year the shipping descriptions and corresponding volume of each type of used oil transported; failure to have a valid hazardous waste transporter registration for the period between June 31 and October 28, 2013, while engaging in the transportation of hazardous waste. The company agreed to pay a penalty of $5,500.

**Electronic Recycling, City of Porterville, Tulare County: No EPA ID. (Complaint).** On February 22, 2015, DTSC and Electronic Recycling entered into a Consent Order resolving violations DTSC identified during September 4, 2012, and November 14, 2013, inspections. The violations include: disposal of used oil to the land; failure to contain releases of universal waste and residuals; and failure to train personnel. The penalty was $16,500.00, with $687.50 monthly payments to be made over 24 months.

**Filter Recycling Services, Inc., City of Rialto, San Bernardino County: CAD982444481 (Complaint).** On October 21, 2014, while at the Office of Administrative Hearings in Los Angeles for a scheduled three-day administrative hearing, DTSC executed a Stipulation and Order with Filter Recycling Services, Inc. (FRS) and its President, Jon L. Bennett, Jr. The Stipulation and Order addresses the violations identified in a December 28, 2010 Enforcement Order that include: unpermitted transfer of used oil; storage of tank trailers of hazardous waste in unpermitted areas; and making false statements in the operating record regarding the disposition of bulk loads of hazardous waste. The Stipulation and Order calls for a total penalty of $75,000. However, in December 2012, DTSC filed a civil complaint for additional violations found during inspections in 2009 and 2012, including accepting unauthorized waste streams, maintaining false/misleading operating records, storage of ignitable waste within 50 feet of the property line and in unauthorized areas outside of the permitted facility, amongst a total of eleven other causes of action. The parties are engaged in discovery and that matter is still pending in Superior Court.

**Pick & Earn Recycling, City of Los Angeles, Los Angeles County: No EPA ID.** On August 28, 2014, DTSC entered into a Consent Order with Pick & Earn Recycling (Pick

& Earn) settling violations discovered on an April 25, 2013, inspection of this universal waste electronic devices handler. Pick & Earn was cited for failure to contain an electronic device in a manner that prevents breakage and release of components to the environment; and failure to maintain training records for at least three years from the date the person last managed universal waste at the facility. The company has agreed to pay a penalty of $5,000.

**Ramos Environmental Services, City of West Sacramento, Yolo County: CAD044003556.** On September 10, 2014, DTSC entered into a Consent Order with Ramos Environmental Services (Ramos) settling violations discovered on a May 29, 2013, inspection of this Standardized Permit Facility. Ramos was cited for the following violations: failure to maintain adequate aisle space; failure to post a sign "Danger Hazardous Waste Area – Unauthorized Personnel Keep Out" at each entrance to the active portion of the facility; and failure to include in its contingency plan a list of all emergency equipment. The company has agreed to pay a penalty of $5,500.

**Stoody Industrial Welding & Supply, Inc., City of National City, San Diego County: CAL000359908 (Complaint).** On June 26, 2015, DTSC entered into a Consent Order with Stoody Industrial settling violations observed during a complaint investigation. Stoody Industrial agreed to a penalty in the amount of $3,000 dollars. Stoody Industrial was cited for storing hazardous waste over the storage limit without authorization or permit from the DTSC. Stoody Industrial is a supplier and distributor of compressed gases and is regulated by the local CUPA.

**Thermo Fluids, Inc., City of Santa Ana, Orange County: CAL000381082.** On November 10, 2014, DTSC entered into a Consent Order with Thermo Fluids settling violations discovered on a January 15, 2014, inspection of this hazardous waste transporter. Thermo Fluids was cited for storage of hazardous waste in an unauthorized area without a permit; and transportation, or offering for transportation, hazardous waste without preparing a completed and signed manifest. The company has agreed to pay a penalty of $16,280.

**Vintage Tech Recyclers, LLC, City Of Rancho Cucamonga, San Bernardino County: CAL000389285.** On March 27, 2015, DTSC entered into a Consent Order (CO) with Vintage Tech Recyclers. The CO settles violations regarding breakage of CRTs and disposal of CRT electron guns in the regular trash. The violation was observed during an August 20, 2014 inspection. The company agreed to pay a penalty of $6,800.

**Waste Tire Products, City of Orland, Glenn County: CAL000267271.** On December 9, 2014, DTSC entered into a Consent Order with Waste Tire Products (WTP) resolving violations observed during an e-waste inspection on March 13, 2014. WTP was cited for failing to label Universal Waste Electronic Devices (UWEDs) and CRTs (repeated for three years in a row), failure to demonstrate accumulation time periods (repeated for three years in a row), failure to contain UWEDs and CRTs in a

manner that prevents breakage and releases (repeated for three years in a row), failure to immediately contain releases of universal waste and universal waste residues to the environment, failing to conduct treatment activities over a containment devise, failure to label and demonstrate accumulation time lengths for universal waste lamps, and failure to contain universal waste lamps in a closed container. WTP has agreed to a penalty of $15,000.

APPENDIX B
IMPERIAL COUNTY AND TRINITY COUNTY CUPA PROGRAMS
IMPLEMENTATION SUMMARY

**BACKGROUND:**

The Unified Program consolidates, coordinates and makes consistent the administrative requirements, permits, inspections and enforcement activities of six environmental and emergency response programs. The state agencies responsible for these programs set the standards for their program while local governments implement the standards. CalEPA oversees the implementation of the Unified Program as a whole. The program is implemented at the local level by 82 local governmental agencies, CUPAs, certified by the Secretary of CalEPA. DTSC has been designated by CalEPA to implement the program in Imperial and Trinity Counties.

New Electronic Reporting: On January 1, 2009, State Assembly Bill 2286 went into effect. This law requires all regulated businesses and all implementing local governmental agencies, CUPAs, to use the Internet to file required CUPA information previously filed by paper forms into the new California Environmental Reporting System (CERS). This includes facility data regarding hazardous material regulatory activities, chemical inventories, underground and aboveground storage tanks, and hazardous waste generation. It also includes CUPA data such as inspections and enforcement actions. All regulated businesses and CUPAs in the State of California must use CERS to file by January 1, 2013. DTSC's Imperial and Trinity CUPAs' internal data systems, EnvisionConnect, will be able to directly interact and exchange information with CERS by March 2015. Therefore, staff will no longer be required to manual enter inspection and enforcement information in both databases. (The data exchange does not have a deadline; however, per AB2286 the CUPAs have to enter inspection and enforcement data into CERS by the end of the fiscal year annually starting 2013/2014. DTSC CUPAs did input inspection information by June 30, 2014. However, enforcement information was entered by December 31, 2014, and CalEPA was notified. This effort was done manually in order to comply with the law).

CUPA Enforcement: To achieve compliance with CERS entries by delinquent businesses DTSC-CUPA program :

- Conducts workshops.
- Enters the business plan while conducting the CUPA inspection.
- Have the facility grant access to their seeded information in CERS for updating.
- Prepare a letter to the regulated community that have not submitted their business plan into CERS giving the option to enter the business plan by themselves or give us permission to enter the business plan into CERS.
- Imperial CUPA administrative staff continues processing walk-in businesses.

DTSC-CUPA program requires all entries of the business plan into CERS by December 1, 2015. After December 1, 2015, DTSC Imperial CUPA and DTSC Trinity CUPA will commence enforcement on any businesses that failed to achieve compliance and seek a monetary penalty not less than $1,500 for annual update and $3,000 for initial CERS filing.



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## A. IMPERIAL COUNTY IMPLEMENTATION ACTIVITIES:

- Identified 891 facilities which are presently receiving their annual invoices.
- Continued to identify newly regulated businesses and remove closed businesses that no longer meet the criteria for being regulated under the CUPA or ceased operating their business.
- 891 facilities were billed in March 2015 to include Aboveground Petroleum Storage Act (APSA) surcharge billing as requested by CalEPA. Due to the surplus, the DTSC Imperial CUPA only billed Imperial County regulated businesses for the State Surcharge Fees at 100% and 40% of the annual fee across the board per Program Element due in 2015. The DTSC Imperial CUPA's surplus funds will be applied to fees which would otherwise be due in year 2015.
- Responded to over 130 inquiries on the program elements and the CERS requirements from generators, regulated facilities, consultants, and other interested parties.
- Performed 118 Hazardous Materials Business Plan inspections during this reporting time period. The CUPA has achieved 41% of the annual inspections required during this reporting time period.
- Performed 101 Hazardous Waste inspections during this reporting time period. The CUPA has achieved 46% of the annual inspections required.
- Performed 82 Underground Storage Tank facility inspections. The CUPA has achieved 95% of the annual inspections required during this reporting time period.
- Performed 40 Aboveground Petroleum Storage Act tank inspections. The CUPA has achieved 69% of the annual inspections required during this reporting time period.
- Performed 5 California Accidental Release Prevention (CalARP) inspections. The CUPA has achieved 31% of the annual inspections required during this reporting time period.
- Conducted 24 complaint investigations and all were abated.
- Reviewed 34 California Office of Emergency Services (CalOES) Notification of Hazardous Materials release. Two were assigned to staff to further investigate and one was converted to a complaint and investigated.
- Continued to attend the monthly CERS User Group meetings and Decade User Group meetings.
- Continued to work with DTSC's Office of Environmental Information Management (OEIM), Decade Software Company representative and CERS representative on software updates.
- Cypress Senior Scientist, CUPA data manager for both Imperial and Trinity CUPAs, worked closely with OEIM and Decade Software company representatives on various occasions throughout the fiscal year to obtain database system fixes, download and upgrading of important software which would correct errors to the CERS Integration Wizard.

- The three-year contract with Decade Software Company was approved. A designated DTSC staff person is working with Decade on the hosting of our database, Envision Connect and Envision Connect Remote.
- Continued to address and correct audit deficiencies and report the findings to CalEPA.
- Responded to 346 Public Record Act requests, all fully complying within the statutory time requirement.
- In this county, 68 percent of the regulated businesses have complied with electronic filing of their Hazardous Materials Business Plans in CERS as required by AB 2286. Inspectors continue to notify facilities that are not in compliance with AB2286 when they conduct inspections. When facilities mail their Business Plans to the CUPA, they are sent a notification that they need to submit it via CERS and that assistance is available from the CUPA. Businesses have access to two computers in a common area at the El Centro Office for public use.
- Three enforcement cases were settled during this reporting period totaling approximately $63,500.
- Manager attended the CUPA Managers' bi-monthly meetings.
- Support staff entered all inspection, violation and enforcement information into CERS as required by AB2286 for Fiscal Year 2013/2014 manually and will continue to do so for Fiscal Year 2014/2015 until both the EnvisionConnect and CERS are capable of transferring data.

Imperial CUPA Environmental Justice activities and settled cases are reported in the Environmental Justice section.

**Chart 1: Estimated Universe of Businesses Regulated by the DTSC CUPA in Imperial County as of June 30, 2015**

| CUPA Program | Approximate Number of Imperial County Businesses Subject to this Program |
|---|---|
| Business Plan/Hazardous Material Plan/Inventory | 836 |
| Hazardous Waste Generator | 652 |
| CAL/ARP | 50 |
| Underground Storage Tank (UST) | 86 |
| Aboveground Petroleum Storage Tank | 184 |



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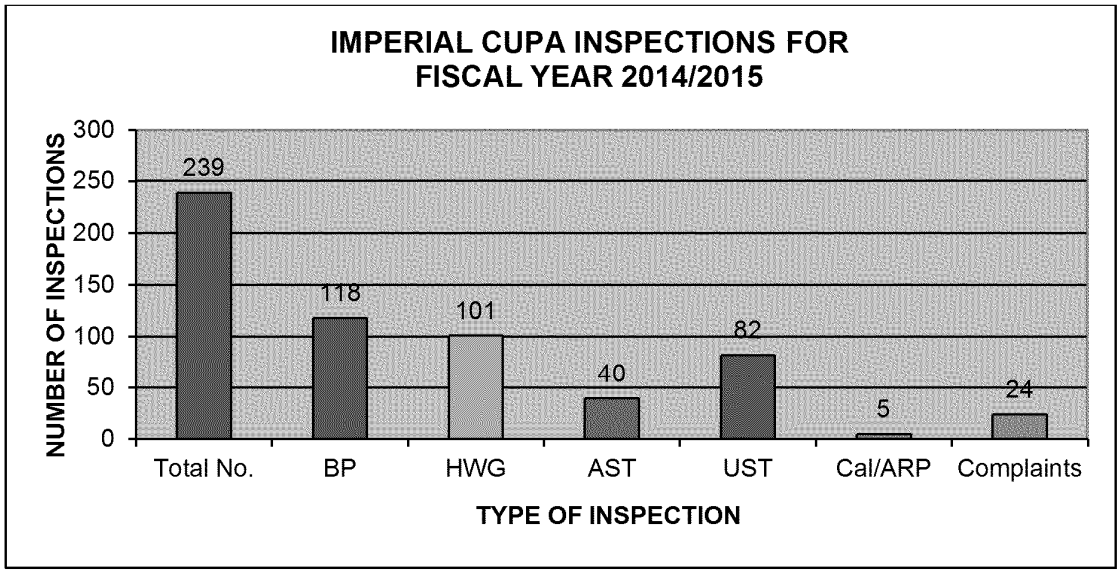
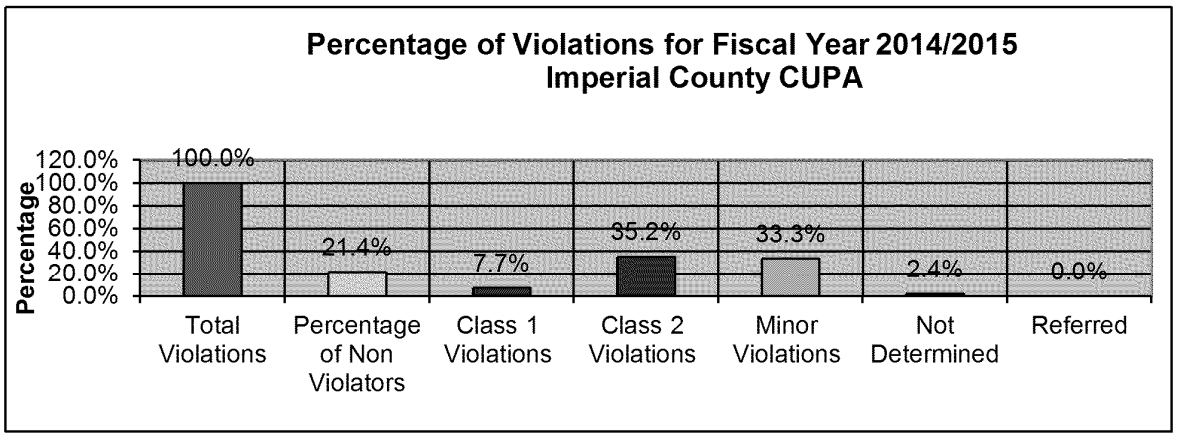
**Chart 2: Number by Type of Imperial County CUPA Inspections**




BP = Hazardous Materials Business Plan
HWG = Hazardous Waste Generator
APSA = Aboveground Petroleum Storage Tank
UST = Underground Storage Tank
CAL/ARP = California Accidental Release Prevention
Complaints= these are in addition to required annual inspections.

(Because some of these businesses have several program elements, the total number of inspections may differ from the total number of inspected facilities.)

**Chart 3: Percentage of Violations in Imperial County for FY 2014/2015**




Non-Violators = 72
Class 2 Violators = 118
Not Determined = 8
Class 1 Violators = 26
Minor Violators = 112
Referred = 0

## B. TRINITY COUNTY IMPLEMENTATION ACTIVITIES:

- Continued to identify newly regulated businesses in Trinity County and remove businesses that have ceased operating within the program elements.
- 138 facilities were billed in January 2015 for Fiscal Year 2014/2015 billing. Aboveground Petroleum Storage Act (APSA) surcharge was included in this billing as requested by CalEPA.
- Conducted 29 CUPA inspections during this reporting time period.
- Performed 23 Hazardous Materials Business Plan inspections during this reporting time period. The CUPA has achieved 53% of the annual inspections required during this reporting time period.
- Performed 22 Hazardous Waste inspections during this reporting time period. The CUPA has achieved 115% of the annual inspections required.
- Performed eight Underground Storage Tank facility inspections. The CUPA has achieved 89% of the annual inspections required during this reporting time period.
- Performed eight APSA tank inspections. The CUPA has achieved 67% of the annual inspections required during this reporting time period.
- There were no complaints received during this reporting period.
- Reviewed two Office of Emergency Services (OES) Notification of Hazardous Materials release.
- Continued to attend the CERS User Group meetings and Decade User Group meetings.
- Continued to work with DTSC's OEIM, Decade Software Company representative and CERS representative on software updates and issues.
- 54% of the regulated businesses in the County have compiled with electronic filing of their Hazardous Materials Business Plans in the California Environmental Reporting System as required per AB 2286. Inspectors continue to notify facilities that are not in compliance with AB 2286 when they conduct inspections. When facilities mail their Business Plans to the CUPA, they are sent a notification that they need to submit it via CERS and that assistance is available from the CUPA.
- Two computers with printers were placed in Trinity County for public use. One was placed in the Weaverville Public Library and the other at the Hayfork public library.
- Continued to address and correct audit deficiencies and report the findings to CalEPA.
- The enforcement case started in FY 2013-2014 is still in progress.



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The following table shows how many of the 138 regulated businesses in Trinity County are subject to each CUPA program element. Some of the businesses are subject to more than one CUPA program.

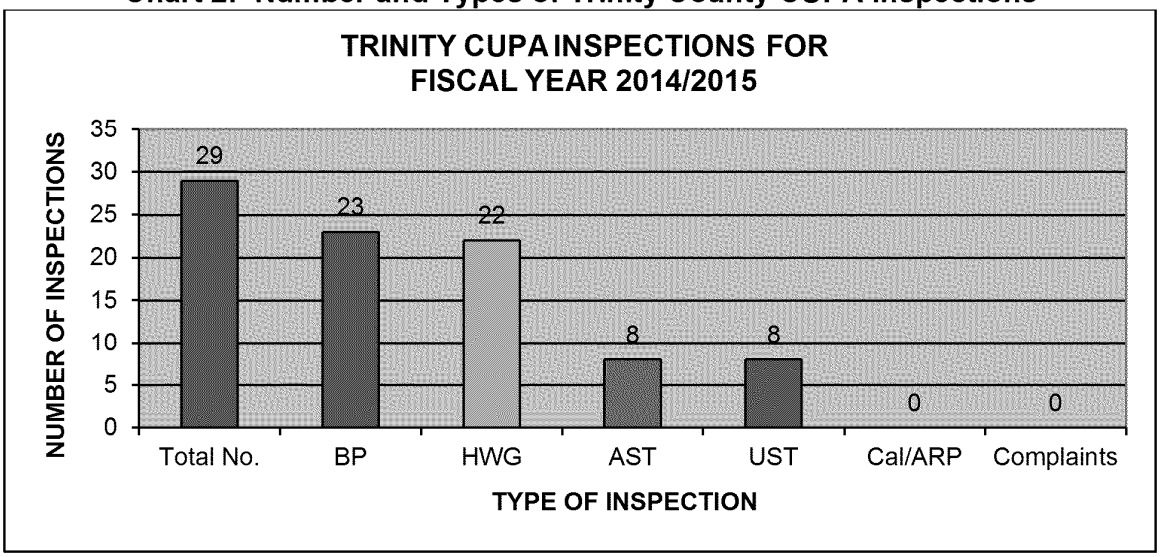
**Estimated Universe of Businesses Regulated by the DTSC CUPA in Trinity County as of June 30, 2015.**

| CUPA Program | Number of Trinity County Businesses Subject to this Program |
|---|---|
| Business Plan/HazMat Plan Inventory * | 129 |
| Hazardous Waste Generator ** | 56 |
| CalARP*** | 5 |
| Underground Storage Tank | 9 |
| Aboveground Petroleum Storage Tank | 37 |

* In Trinity County, the Hazardous Materials Management Plan/Hazardous Material Inventory Plan is covered by the Business Plan requirements.
** The Hazardous Waste Generator category also covers Hazardous Waste Tiered Permitting (HWTP). No HWTP regulated businesses have been found to date in Trinity County.
*** Three businesses have been identified as CalARP facilities. One of these facilities has three stationary sources, bringing the total number of CalARP sites up to five.

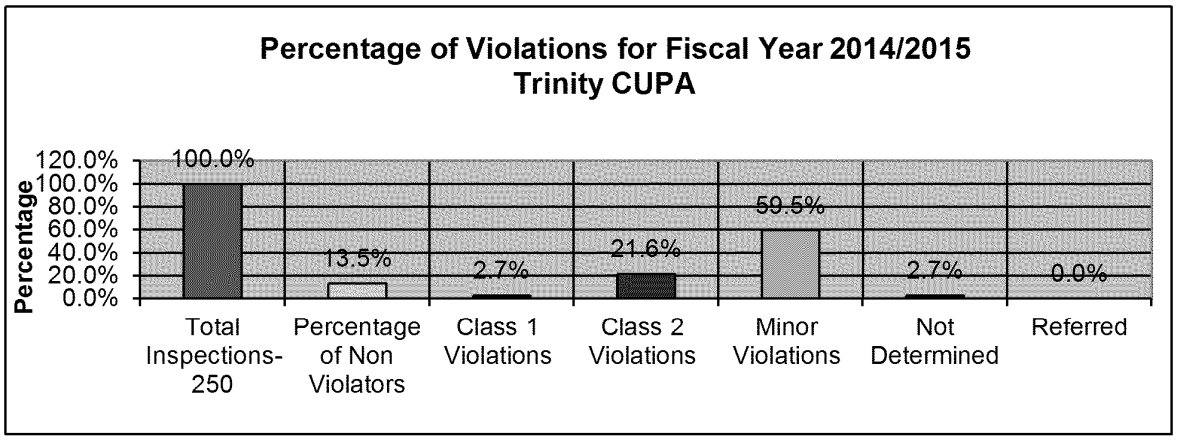
The following chart shows the number of each type of Trinity County sites subject to CUPA regulations.

**Chart 2: Number and Types of Trinity County CUPA Inspections**




BP = Hazardous Materials Business Plan
HWG = Hazardous Waste Generator
APSA = Aboveground Petroleum Storage Tank
UST = Underground Storage Tank
CAL/ARP = California Accidental Release Prevention
Complaints = these are in addition to required annual inspections.
(Since some of these businesses have several program elements, the total number of inspections may differ from the total number of inspected facilities.)

**Chart 3: Percentage of Violations in Trinity County for FY 2014/2015**




| | | | |
|---|---|---|---|
| Non-Violators = | 5 | Minor Violators = | 22 |
| Class I Violators = | 1 | Not Determined = | 1 |
| Class 2 Violators = | 8 | Referred = | 0 |

| | | |
|---|---|---|
| **DIVISION:** Hazardous Waste Management Program<br>**PROGRAM:** Permitting Division<br>**PERIOD:** 7/01/14-6/30/20 | **FEDERAL SHARE:** $[Enter Funding]<br>**STATE SHARE:** $[Enter Funding]<br>**TOTAL:** $[Enter Funding] | **DEPUTY DIRECTOR:** **Elise Rothschild**<br>**PROGRAM MANAGER:** **Rizgar Ghazi** |

**TASK 3:** PERMITTING

**TASK 3.1:** HAZARDOUS WASTE PERMITS ADMINISTRATION

**DESCRIPTION:** Administer the Hazardous Waste Permits Program in accordance with the California Code of Regulations and achieve EPA GPRA goals.

| GPRA Year | OUTPUT DESCRIPTION | FACILITY | PLANNED DATE | ACTUAL DATE | COMMENTS |
|---|---|---|---|---|---|
| FY15 | Operating Permit | Crosby & Overton<br>EPA ID No. CAD 028 409 019 | 8/2014 | **8/22/2014** | 8/22/2014: Permit Renewal (Effective) |
| FY15 | Operating Permit | Naval Air Station North Island (NASNI) Mixed Waste Storage Facility<br>EPA ID No. CAR 000 019 430 | 1/2015 | **12/31/2014** | 1/2/08 Status: Permit expired<br>1/28/08 Status: Administrative review complete<br>6/13/13 Status: Move to FY 13/14 – Resource issue<br>3/3/14 Response to 1st NOD received<br>12/4/14 Status: Moved to FY 14/15<br>12/31/2014 Status: Permit Renewal (Issued) |
| FY15 | Operating Permit | Veolia ES Technical Solutions LLC-Richmond<br>EPA ID No. CAT 080 014 079 | 4/2014 | **10/8/2014** | 2/11/14 Status: Draft Permit Public Noticed.<br>Comment Period ends 3/28/14<br>10/8/14: Permit Renewal (Effective)<br>**6/26/2015**: CONTAINTRT-Drum Crusher (GPRA Unit) (Permitted Clean Closed Administrative ) |
| FY15 | Post Closure Permit (New) | ACME Fill Corporation<br>EPA ID No. CAD 041 835 695 | 4/2015 | **6/26/2015** | 1/27/13 Status: Revised application submitted – New PC<br>7/17/13 Status: Legal/Ag review of FR Compliance Schedule. Moved to FY 13/14.<br>3/26/13 Status: Admin Review completed<br>11/21/14 Status: Public Comment Period Ended.<br>6/26/2015 Status: Permit Renewal (Effective) |
| FY16 | Post Closure Permit | Tesoro Carson Refinery<br>EPA ID No. CAD077227049 | 11/2015 | | 11/26/13 Status: Response to 2nd NOD<br>6/17/2014 Status: Response to 3rd NOD<br>DTSC legal review has been delayed. |
| FY16 | Post Closure Permit | Kaiser Ventures<br>EPA ID CAD 008 274 938 | 11/2015 | | 4/15/2014 Status: APPLICANT HOLDS PUBLIC MEETING |
| FY16 | Operating Permit | General Electric International Inc<br>EPA ID No. CAD 030 584 502 | 12/2015 | | 11/30/14 Status: Permit expires 11/30/14<br>10/2/13 Call In Letter Issued |
| FY16 | Operating Permit | Lawrence Livermore National Laboratory<br>EPA ID No. CA2 890 012 584 | 1/2016 | | 1/23/13 Status: CEQA Approved<br>4/29/15 Status: Start Public Comment Period<br>8/3/15 Status: Comment Period Ends |
| FY 16 | Post Closure Permit | Forward Landfill<br>EPA ID No. CAD990794133 | 2/2016 | | 3/19/13 Status: Administrative Review Completed |



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|---|---|---|
| **DIVISION:** Hazardous Waste Management Program<br>**PROGRAM:** Permitting Division<br>**PERIOD:** 7/01/14-6/30/20 | **FEDERAL SHARE:** $[Enter Funding]<br>**STATE SHARE:** $[Enter Funding]<br>**TOTAL:** $[Enter Funding] | **DEPUTY DIRECTOR:** **Elise Rothschild**<br>**PROGRAM MANAGER:** **Rizgar Ghazi** |

**TASK 3:** PERMITTING

**TASK 3.1:** HAZARDOUS WASTE PERMITS ADMINISTRATION

**DESCRIPTION:** Administer the Hazardous Waste Permits Program in accordance with the California Code of Regulations and achieve EPA GPRA goals.

| GPRA Year | OUTPUT DESCRIPTION | FACILITY | PLANNED DATE | ACTUAL DATE | COMMENTS |
|---|---|---|---|---|---|
| FY16 | Post Closure Permit | John Smith Road Landfill<br>EPA ID No. CAD 990 665 432 | 2/2016 | | 12/8/13 Status: Permit expires 12/8/13<br>9/11/12 Status: Call In letter complete<br>6/10/13 Status: Administrative Review Complete |
| FY16 | Undergoing Closure | Safety Kleen Systems Inc El Monte Accumulation Center<br>EPA ID No. CAT 000 613 893 | 3/2016 | | 5/7/18 Status: Permit expires 5/4/18<br>5/5/14 Status: Closure Notice Received |
| FY 16 | Post Closure Permit | Panoche Facility<br>EPA ID No. CAD000060012 | 3/2016 | | 1/18/13 Status: Administrative Review Completed<br>6/25/14 Status: Disclosure (Cleared) |
| FY16 | Operating Permit | Demenno Kerdoon<br>EPA ID No. CAT 080 013 352 | 3/2016 | | 7/6/11 Status: Permit expired 7/6/11<br>2/28/13 Status: 2nd NOD issued<br>7/1/14 Status: 3rd NOD issued |
| FY16 | Operating Permit | Evoqua Water Technologies LLC<br>EPA ID No. CAD 097 030 993 | 3/2016 | | 7/7/08 Status: Renewal NOD issued |
| FY16 | Operating/Post Closure Permit | Chevron USA Inc Richmond Refinery<br>EPA ID No. CAD 009 114 919 | 3/2016 | | 3/7/13 Status: PC permit expires 3/7/13.<br>10/11/16 Status: Operating permit expires 10/11/16<br>PC Renewal: 12/21/2012 Administrative Review complete |
| FY16 | Operating Permit | Naval Air Weapons Station China Lake<br>EPA ID No. CA2 170 023 152 | 4/2016 | | 6/30/11 Status: Permit expired<br>3/1/11 Status: Administrative review complete<br>7/17/13 Status: CEQA issues. Move to FY 13/14<br>12/4/2014 Status: Move to FY 14/15 |
| FY16 | Operating Permit | Clean Harbors Westmorland, LLC<br>EPA ID No. CAD 000 633 164 | 4/2016 | | 6/4/12 Status: Technical Completeness 4/25/11 |
| FY16 | Post Closure Permit | Kearney – KPF<br>EPA ID No. CAD 981 429 715 | 4/2016 | | 7/22/14 Status: Permit expires 7/22/14<br>6/26/13 Call-In Letter Issued |
| FY16 | Operating Permit | Southern California Edison Co– San Onofre Nuclear Generating Station<br>EPA ID No. CAD 000 630 921 | 4/2016 | | 1/30/15 Status: Permit expires 1/30/15<br>1/2/14 Application Part A & B Received |



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|---|---|---|
| **DIVISION:** Hazardous Waste Management Program<br>**PROGRAM:** Permitting Division<br>**PERIOD:** 7/01/14-6/30/20 | **FEDERAL SHARE:** $[Enter Funding]<br>**STATE SHARE:** $[Enter Funding]<br>**TOTAL:** $[Enter Funding] | **DEPUTY DIRECTOR:** **Elise Rothschild**<br>**PROGRAM MANAGER:** **Rizgar Ghazi** |

**TASK 3:** PERMITTING

**TASK 3.1:** HAZARDOUS WASTE PERMITS ADMINISTRATION

**DESCRIPTION:** Administer the Hazardous Waste Permits Program in accordance with the California Code of Regulations and achieve EPA GPRA goals.

| GPRA Year | OUTPUT DESCRIPTION | FACILITY | PLANNED DATE | ACTUAL DATE | COMMENTS |
|---|---|---|---|---|---|
| FY16 | Operating Permit | KW Plastics of California<br>EPA ID No. CAD 982 435 026 | 5/2016 | | 7/28/14 Status: Permit expires 7/28/14<br>3/3/14 Administrative Review Complete |
| FY16 | Closure | Riverbank Army Ammo<br>EPA ID No. CA7 210 020 759 | 5/2016 | | 12/30/11 Status: Facility submitted intent to close<br>12/28/11 Status: Facility stopped operating<br>2/25/12 Status: Public Comment period ended<br>12/4/14 Status: Moved to FY 15/16 |
| FY16 | Operating Permit | Phibro Tech, Inc.<br>EPA ID No. CAD 008 488 025 | 5/2016 | | 3/29/1995 Call-In Letter issued<br>6/4/12 Status: Draft permit to be re-noticed ?? |
| FY15 | Post Closure Permit | Lawrence Livermore National Laboratory – Site 300<br>EPA ID No. CA2 890 090 002 | 6/2016 | | 12/14/12: Admin review complete |
| FY16 | Operating Permit | Lawrence Livermore National Laboratory – Site 300<br>EPA ID No. CA2 890 090 002 | 6/2016 | | 6/18/08 Status: Draft permit issued<br>8/2/08 Public Comment End |
| FY 15 | Post Closure Permit | Vine Hill Complex<br>EPA ID No. CAD982521460 | 6/2016 | | 1/10/13 Status: Administrative Review Completed |
| FY16 | Operating Permit | Safety-Kleen of California Inc<br>EPA ID No. CAD 980 887 418 | 6/2016 | | 1/5/15 Status: Permit expires 1/5/15 |
| FY 17 | Post Closure Permit | Phillips 66 Company San Francisco Refinery<br>EPA ID No. CAD009108705 | 9/2016 | | 11/13/13 Status: Administrative Review Completed<br>2/13/14 Status: 1st Notice of Deficiency Issued<br>8/25/2014 Status: 2nd NOD issued<br>1/8/2015 Staus: 3rd NOD issued<br>7/14/2015 Status: Permit completion date depends on Legal review. |
| FY17 | Operating Permit | The Dow Chemical Company<br>EPA ID No. CAD 076 528 678 | 9/2016 | | 6/4/12 Status: Operating permit expires on 4/28/13. Post Closure permit expires on 12/12/17<br>11/8/11 Status: Call In complete<br>10/29/12 Status: Part A and B received<br>10/14/13 Response to 1st NOD Received |



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|---|---|---|
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**TASK 3:** PERMITTING

**TASK 3.1:** HAZARDOUS WASTE PERMITS ADMINISTRATION

**DESCRIPTION:** Administer the Hazardous Waste Permits Program in accordance with the California Code of Regulations and achieve EPA GPRA goals.

| GPRA Year | OUTPUT DESCRIPTION | FACILITY | PLANNED DATE | ACTUAL DATE | COMMENTS |
|---|---|---|---|---|---|
| FY17 | Closure | The Dow Chemical Company<br>EPA ID No. CAD 009 547 050 | 2016 | | 6/4/12 Status: Facility withdrew permit renewal application and opted for closure through corrective action.<br>7/28/06 Status: Permit expired<br>7/28/96 Status: Renewal permit issued, closure plan was part of this permit. ***** |
| FY17 | Operating Permit | CHEMTRADE WEST US LLC<br>EPA ID No. CAD 009 142 290 | 2016 | | 5/26/16 Status: Permit expires 5/26/16 |
| FY17 | Operating Permit | Pacific Gas & Electric–Diablo Canyon<br>EPA ID No. CAD 077 966 349 | 2016 | | 7/30/16 Status: Permit expires 7/30/16 |
| FY17 | Post Closure Permit | TFX Aviation Inc.<br>EPA ID No. CAD008383127 | 2016 | | Call In Letter to be issued 4/7/14<br>4/30/2015 Status: Admin review complete |
| FY17 | Operating Permit | Clean Harbors Buttonwillow, LLC<br>EPA ID No. CAD 980 675 276 | 2/2017 | | 10/4/07 Status: 2nd NOD issued<br>10/10/13 Response to 2nd NOD Received<br>11/2013 DTSC Initiated request for facility to change their waste staging practice which resulted in tentative design changes. |
| FY17 | Operating Permit | Edwards Air Force Base<br>EPA ID No. CA1 570 024 504 | 2/2017 | | 11/3/15 Status: Permit expires 11/3/15<br>Call In Letter to be issued 6/7/2014<br>[Two closures in progress since 1998 (Unit OBOD2, OBOD1)] |
| FY17 | Operating Permit | Sandia National Laboratories<br>EPA ID No. CA2 890 012 923 | 3/2017 | | 3/29/14 Status: Permit expires 3/29/14<br>11/6/13 Public Notice – Permit received.<br>12/4/14 Status: Moved to FY 15/16 |
| FY17 | Operating Permit | Clean Harbors San Jose<br>EPA ID No. CAD 059 494 310 | 4/2017 | | 2/19/13 Status: Permit expires 2/19/13.<br>6/30/12 Status: Call In complete<br>12/13/12 Status: Admin review complete<br>12/4/14 Status: Projected Complete FY 15/16 |
| FY17 | Operating Permit | Duke Energy Moss Landing LLC<br>EPA ID No. CAT 080 011 653 | 4/2017 | | 4/6/16 Status: Permit expires 4/6/16<br>6/21/2015 Status: Administrative Review complete |



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|---|---|---|
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**TASK 3:** PERMITTING

**TASK 3.1:** HAZARDOUS WASTE PERMITS ADMINISTRATION

**DESCRIPTION:** Administer the Hazardous Waste Permits Program in accordance with the California Code of Regulations and achieve EPA GPRA goals.

| GPRA Year | OUTPUT DESCRIPTION | FACILITY | PLANNED DATE | ACTUAL DATE | COMMENTS |
|---|---|---|---|---|---|
| FY17 | Operating Permit | Chemical Waste Mgmt Inc. Kettleman<br>EPA ID No. CAT 000 646 117 | 5/2017 | | 6/14/12 Status: Permit expires 6/30/13.<br>2/15/13 Status: Part A and B received<br>2/18/13 DTSC Meeting Summary provided by WM |
| FY17 | Operating Permit | HGST Inc<br>EPA ID No. CAR 000 128 793 | 6/2017 | | 5/15/15 Status: Permit expires 5/16/15 |
| FY17 | Operating Permit | Quemetco Inc.<br>EPA ID No. CAD066233966 | 6/2017 | | |
| FY18 | Operating Permit | Safety Kleen Systems Inc.<br>EPA ID No. CA0 000 084 517 | 2017 | | 7/28/16 Status: Permit expires 7/28/16 |
| FY18 | Post Closure Permit | Big Blue Hills Pesticide Cont Disposal<br>EPA ID No. CAT 080 010 606 | 2017 | | 9/7/17 Status: Permit expires 9/7/17<br>Call In letter to be issued 3/7/2016 |
| FY18 | Operating Permit | GEM of Rancho Cordova LLC DBA PSC Environmental SVS of Rancho Cordova<br>EPA ID No. CAD 980 884 183 | 2017 | | 4/25/17 Status: Permit expires 4/25/17 |
| FY18 | Operating Permit | Lawrence Berkeley National Laboratory<br>EPA ID No. CA4 890 008 986 | 2017 | | 12/21/16 Status: Permit expires 12/21/16 |
| FY18 | Operating Permit | Pacific Scientific Energetic Materials Co<br>EPA ID No. CAD 009 220 898 | 1/2018 | | 5/11/16 Status: Permit expires 5/11/16 |
| FY18 | Operating Permit | THE BOEING COMPANY<br>EPA ID No. CAD 060 897 063 | 6/2018 | | 4/10/17 Status: Permit expires 4/10/17 |



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|---|---|---|
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| GPRA Year | OUTPUT DESCRIPTION | FACILITY | PLANNED DATE | ACTUAL DATE | COMMENTS |
|---|---|---|---|---|---|
| FY19 | Operating Permit | San Diego Gas & Electric Co<br>Miramar Waste Management Facility<br>EPA ID No. CAD 981 168 107 | 8/2018 | | 8/5/17 Status: Permit expires 8/5/17, reminder letter to be issued by 8/5/2015, application due 2/05/2017. |
| FY19 | Post Closure Permit | The Dow Chemical Company<br>EPA ID No. CAD 076 528 678 | 2018 | | 12/12/17 Status: OP Permit (BIF) expired 4/27/13, OP Permit expires 7/30/16, PC Permit expires 12/12/17 |
| FY19 | Post Closure Permit | Occidental of Elks Hills Inc<br>EPA ID No. CA4 170 024 414 | 2018 | | 7/15/18 Status: Permit expires 7/15/18 |
| FY19 | Post Closure Permit | Benson Ridge Facility<br>EPA ID No. CAD 000 633 289 | 2018 | | 6/10/18 Status: Permit expires 6/9/18 |
| FY19 | Post Closure Permit | Montezuma Hills facility<br>EPA ID No. CAD 079 089 512 | 2018 | | 10/20/18 Status: Permit expires 10/20/18 |
| FY19 | Closed | Safety Kleen<br>EPA ID No. CAD 053 044 053 | 2018 | | 10/26/17 Status: Permit expires 10/26/17<br>Facility Closed 10/26/2007 |
| FY19 | Closed | Safety Kleen EPA ID No. CAT 000 613 943 | 2018 | | 10/26/17 Status: Permit expires 10/26/17<br>Facility Closed 10/26/2007 (Refer RWQCB) |
| FY19 | Closed | Safety Kleen<br>EPA ID NO. CAT 000 613 968 | 2018 | | 10/26/17 Status: Permit expires 10/26/17<br>Facility Closed 10/26/2007 |
| FY19 | Operating Permit | Safety Kleen Systems Inc<br>EPA ID No. CAD 000 613 976 | 2018 | | 5/23/17 Status: Permit expires 5/23/17 |



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|---|---|---|
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|---|---|---|---|---|---|
| FY19 | Undergoing Closure | Shell Martinez Refinery<br>EPA ID No. CAD 009 164 021 | 2018 | | 5/21/18 Status: Permit expires 5/21/18<br>Closure Notice Received 1/6/2014 |
| FY19 | Post Closure Permit | Techalloy Co Inc.<br>EPA ID No. CAD 059 277 137 | 2018 | | 2/29/18 Status: Permit expires 3/1/18 |
| FY19 | Operating Permit | Naval Air Station San Diego<br>EPA ID No. CA6 170 024 289 | 1/2019 | | 7/26/16 Status: Permit expires 7/26/16, application due 1/28/2016. |
| FY19 | Operating/Post Closure Permit | Chevron El Segundo Refinery<br>EPA ID No. CAD 008 336 901 | 1/2019 | | 5/17/17 Status: Permit expires 5/17/17<br>Call In Letter Issued 6/3/2015, application due 12/17/2015. |
| FY20 | Post Closure Permit | Phillips 66 Co Los Angeles Refinery Carson Plant<br>EPA ID No. CAD 980 881 676 | 2019 | | 11/26/17 Status: Permit expires 11/26/17<br>Call in letter to be issued 11/23/2015, application due 5/26/2017 |
| FY20 | Operating Permit | Raytheon Space & Airborne Systems<br>EPA ID No. CAD 000 633 230 | 2019 | | 10/8/17 Status: Permit expires 10/8/17 |
| FY20 | Operating Permit | Dept. of Air Force Vandenberg AFB<br>EPA ID No. CA9 570 025 149 | 2019 | | 5/6/18 Status: Permit expires 5/5/18 |
| FY20 | Operating Permit | Southern. California Gas Co<br>EPA ID No. CAD 981 422 017 | 2019 | | 5/4/17 Status: Permit expires 5/4/17 |
| FY20 | Operating Permit | Southern. California Gas Co<br>EPA ID No. CAT 000 625 137 | 2019 | | 7/30/17 Status: Permit expires 7/30/17 |



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|---|---|---|
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|---|---|---|---|---|---|
| FY20 | Operating Permit | Travis Air Force Base<br>EPA ID No. CA5 570 024 575 | 2019 | | 1/19/18 Status: Permit expires 1/19/18 |
| FY20 | Operating Permit | Safety-Kleen<br>EPA ID No. CAD 066 113 465 | 2019 | | 7/23/17 Status: Permit expires 7/23/17 |
| FY20 | Operating Permit | Safety Kleen Systems Inc Highland Service Center<br>EPA ID No. CAD 000 613 927 | 2019 | | 6/23/17 Status: Permit expires 6/23/17 |
| FY20 | Post Closure Permit | Golden Eagle Refinery<br>EPA ID No. CAD 000 072 751 | 2019 | | 2019 Status: Permit expires 2/29/2019 |
| FY20 | Post Closure Permit | West County Landfill Inc<br>EPA ID No. CAD 041 844 002 | 2019 | | 2019 Status: Permit expires 5/31/2019 |
| FY21 | Post Closure Permit | Phillips 66 Co Los Angeles Refinery Wilmington Plant<br>EPA ID No. CAD 008 237 679 | 2020 | | 7/23/18 Status: Permit expires 7/23/18<br>Call in letter to be issued 11/23/2016, application due 1/23/2018 |
| FY21 | Operating Permit | Rho Chem LLC<br>EPA ID No. CAD 008 364 432 | 2020 | | 8/28/18 Status: Permit expires 8/27/18 |
| FY21 | Operating Permit | Aerojet Rocketdyne, Inc.<br>EPA ID No. CAD 000 030 494 | 2020 | | 2019 Status: 2 Permits – OP expires 3/28/2019 & PC expires 4/13/2019 |
| FY21 | Operating Permit | Safety Kleen Systems Inc<br>EPA ID No. CAT 000 613 935 | 2020 | | 2019 Status: Permit expires 3/17/2019 |
| FY22 | Post Closure Permit | Square D Company<br>EPA ID No. CAD 050 746 775 | 2021 | | 2019 Status: Permit expires 5/31/2019 |



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|---|---|---|
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|---|---|---|---|---|---|
| FY23 | Operating Permit | Chevron Chemical Co.<br>EPA ID No. CAD 043 237 486 | 2022 | | 2020 Status: Permit expires 7/23/2020 |
| FY23 | Post Closure Permit | Honeywell International Inc.<br>Former Baron Blakeslee<br>EPA ID No. CAD 074 644 659 | 2022 | | 2020 Status: Permit expires 3/17/2020 |
| | Post Closure Permit | The Boeing Co –Canoga Park<br>EPA ID No. CAD 093 365 435 | | | 4/17/06 Status: 1st NOD issued |
| | Closure | Chemtura Corporation (formerly Witco Corporation)<br>EPA ID No. CAD 009 137 779 | | | Under corrective action per C. Padilla 4/23/2013<br>5/28/02 Status: Permit expired |
| | Closure | Dynegy Morro Bay LLC<br>EPA ID No. CAT 080 011 646 | | | 6/4/12 Status: Waiting for confirmation on clean closure of unit 5<br>6/30/09 Status: Permit expired<br>8/15/08 Status: Clean closed units 1, 2, and 3<br>1989 Status: Clean closed unit 4 |
| | Closure | Gallade Chemical, Inc.<br>EPA ID No. CAD 029 363 876 | | | 6/4/12 Status: Undergoing closure through clean up |
| | Closed | IBM Corporation<br>EPA ID No. CAD 990 843 989 | | | 1/2003 Status: Facility sold to Hitachi GST<br>Closure Final 5/18/2009 |
| | Closure | LA Department Water & Power<br>EPA ID No. CAD 000 633 305 | | | 6/4/12 Status: Undergoing closure through clean up<br>11/9/00 Status: 1st NOD for closure plan issued |
| | Closure | Safety-Kleen Systems Inc<br>EPA ID No. CAD 980 817 159 | | | 11/1/00 Status: Closure plan received<br>3/5/2013 Referred to Corrective Action |
| | Closure | Statewide Environmental Services<br>EPA ID No. CAD 000 088 252 | | | 6/4/12 Status: Undergoing closure through clean up |
| | Meet EPA the following Permitting GPRA Goals for each federal fiscal year (FFY):<br>FFY 12 - 8 | | | | FFY 12 – 8 GPRA Permits achieved.<br>FFY 13 – 6 GPRA Permits achieved.<br>FFY 14 – 4 GPRA Permits achieved. |



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|---|---|---|
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|---|---|---|---|---|---|
| | FFY 13 - 8<br>FFY 14 - 8<br>FFY 15 - 8<br><br>[Note: The FFY is from Oct. 1 to Sept. | | | | |
| ~~FY16~~ | ~~Operating Permit~~ | ~~Exide Technologies Inc.~~<br>~~EPA ID No. CAD 097 854 541~~ | ~~12/2015~~ | ~~5/7/2015~~ | ~~8/3/12 Status: 2nd NOD issued~~<br>~~5/7/2015:Permit Withdrawn~~ |
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**To:** Edward.Nieto_dtsc.ca.gov[Edward.Nieto@dtsc.ca.gov]; Phil.Blum_dtsc.ca.gov[Phil.Blum@dtsc.ca.gov]; Choe, Michael@DTSC[Michael.Choe@dtsc.ca.gov]; Koch, Lori@DTSC[Lori.Koch@dtsc.ca.gov]
**Cc:** Lavinger, Steve@DTSC[Steve.Lavinger@dtsc.ca.gov]; Gross, Barbara[Gross.Barbara@epa.gov]; Janes, Elizabeth[Janes.Elizabeth@epa.gov]
**From:** Zabaneh, Mahfouz
**Sent:** Mon 11/9/2015 3:31:22 PM
**Subject:** DTSC permit list/Biennial report data on Wastes Received
CA_BR_TonnageReceived_07thru13.xlsx

Hi Lori, Ed, Phil, & Mike,

Many of the TSDFs in California shoe zero wastes received in the 2013 Biennial Report cycle.

Not having this info will put the EPA and DTSC inspectors at a disadvantage because they will not have appropriate characterization of these facilities by the wastes listed as received.

Please see attached report.

Who should we contact at DTSC to investigate the missing data or why this data was not entered?

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

US EPA Region 9

Mail Code LND-4-2

75 Hawthorne Street

San Francisco, CA 94105

Email address: zabaneh.mahfouz@epa.gov

415-972-3348

415-947-3530 (fax)

**To:** Eshaghian, Mike@DTSC[Mike.Eshaghian@dtsc.ca.gov]
**Cc:** Gross, Barbara[Gross.Barbara@epa.gov]
**From:** Zabaneh, Mahfouz
**Sent:** Fri 7/31/2015 4:33:39 PM
**Subject:** RE: Tesoro Refining and Marketing Company, Carson Refinery Draft Post Closure Permit

Hi Mike,

It is good to hear from you. I hope all is well with you too.

If we decide not to review this draft permit, do you think you can public notice it earlier that 8/12 and have it issued before Sep 30, 2015 ( Federal Fiscal Year), assuming you don't get any comments during the public comment period?

I would like to understand what our options are!

Best regards,

Mike Zabaneh, P.E.

Environmental Engineer/Project Manager

RCRA Permits Office

Lands Division

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**From:** Eshaghian, Mike@DTSC [mailto:Mike.Eshaghian@dtsc.ca.gov]
**Sent:** Thursday, July 30, 2015 3:13 PM

**To:** Zabaneh, Mahfouz
**Cc:** Eshaghian, Mike@DTSC
**Subject:** Tesoro Refining and Marketing Company, Carson Refinery Draft Post Closure Permit

Hi Mike,

I have not talked with you for a while. I hope all is well. I have attached draft Post Closure Permit Renewal for Tesoro Refining and Marketing Company, Carson Refinery, previously BP West Coast Products, Carson Refinery. We are planning to public notice this draft permit on August 12, 2015. Please let me know if you have any comments before August 12, 2015. Thanks.

Mike Eshaghian

Department of Toxic Substances Control

Permitting Branch

(818) 717-6679