

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER R5-2011-0711  
FOR

Azad Amiri, Ameri Oil Company, Inc., and Nut Tree Gas, Inc.  
SOLANO COUNTY

This Order is issued to Azad Amiri, Ameri Oil Company, Inc., and Nut Tree Gas, Inc. (hereafter collectively referred to as “Dischargers”), based on provisions of Water Code section 13304 and Health and Safety Code section 25296.10, which authorize the Regional Water Quality Control Board, Central Valley Region (“Central Valley Water Board” or “Board”) to issue a Cleanup and Abatement Order (“Order”), and Water Code section 13267, which authorizes the Central Valley Water Board to require the preparation and submittal of technical and monitoring reports.

The Executive Officer finds, with respect to the Discharger’s acts or failure to act, the following:

**PROPERTY OWNERSHIP AND OPERATIONS**

1. Azad Amiri and Ameri Oil Company, Inc., are named as Dischargers because they owned and/or operated the underground storage tank (“UST”) system during the time petroleum constituents were discharged/released.
2. Nut Tree Gas, Inc. is named as a Discharger because it is the current property owner. Solano County records show that Nut Tree Gas, Inc. became owner of the property at 1501 East Monte Vista Avenue, Vacaville (the “Site”)(Solano County APN 0129-350-190) in June 2009.

**BACKGROUND**

3. In November 1990, a gasoline leak was discovered during a Phase I environmental site assessment. The leak was originally thought to be the result of overfills. The formal unauthorized release form was not completed until 15 January 1992. As a result of the identified release an investigation to determine the extent of the contamination was required by Solano County Department of Resource Management (“SCDRM”). A letter dated 14 February 1992 directed Azad Amiri to submit a work plan/proposal to assess and remediate the identified contamination. Azad Amiri failed to meet the County’s deadline.
4. In October 1995, four USTs (3 – 10,000 gallon gasoline and 1- 12,000 gallon diesel) , two fueling dispensers, and associated piping were removed from the Site. In addition, 1- 550 gallon waste oil UST was closed in place. Soil was also over-excavated in both the UST and dispenser areas. Although groundwater was not found in the excavations, soil sampling confirmed an unauthorized release.
5. From February 1999 through November 2005, a number of borings were advanced both at the Site and on adjacent and nearby properties in an effort to delineate the extent of soil and groundwater contamination. A total of 50 soil borings, 8 groundwater monitoring wells, and 14 extractions wells were installed, and applicable soil and groundwater samples were collected and analyzed. Soil impacts were identified as high as 4,450 mg/kg, 76,000 ug/kg, 14,000 ug/kg of Total Petroleum Hydrocarbons as gasoline (“TPHg”), benzene, and

methyl tertiary-butyl ether (“MtBE”), respectively. A partial list of groundwater impacts were found as high as 210,000 ug/L, 93,000 ug/L, 120,000 ug/L, 100,000 ug/L, and 62,00 ug/L of TPHg, Total petroleum hydrocarbons as diesel (“TPHd”), benzene, MtBE, and Tertiary Butyl Alcohol (“TBA”), respectively.

6. In June 2004 a 30-day Dual-Phase Extraction (“DPE”) test was conducted. An estimated 10,603 lbs. of petroleum hydrocarbons was reported to have been removed from the subsurface. Removal rates averaged 342 lbs. per day.
7. The Dischargers remained in relative compliance with SCDRM directives until mid-2007. At that time, the Dischargers ceased submitting required quarterly groundwater monitoring reports. SCDRM sent Dischargers delinquency notices (25 February 2008, 3 December 2008), directing them to submit the required document. The Dischargers were informed that their failure to comply would result in the case being referred to the Solano County District Attorney’s office or the Central Valley Water Board.
8. In a letter dated 26 April 2010 SCDRM formally turn lead oversight of the case to the Board due to Dischargers’ continued non-compliance with their directives.
9. By letter dated 6 May 2010, Board staff informed the Dischargers of the lead oversight agency change, directed them to immediately re-instate quarterly groundwater monitoring, and directed them to submit a work plan to complete delineation of the identified plume. The first quarterly report and the work plan were both to be submitted by 30 July 2010. As the result of a meeting with the Dischargers on 19 May 2010, Board staff gave an extension for the quarterly report to 30 October 2010 and changed the work plan due date to 5 July 2010. The Dischargers’ environmental consultant subsequently requested an additional extension to 23 July 2010, as they were unable to meet the established deadline. A quarterly report was submitted 1 November 2010, the first since mid-2007, and the work plan was submitted 22 July 2010.
10. In a letter dated 8 November 2010 the work plan (see Finding 9) was approved and Board requested that the results be submitted no later than 10 December 2010. The report was not submitted by the due date. Board staff subsequently extended this deadline to 30 December 2010, but the report has not yet been submitted.
11. The table below shows the concentrations of petroleum constituents reported in the last groundwater sampling conducted at the Site (October 2010) and lists the water quality objectives (“WQOs”) for these constituents.

<b>Constituent</b>	<b>Maximum Concentration (µg/L)</b>	<b>Water Quality Objectives (µg/L)</b>
TPH as gasoline (TPHg)	95,000	5 <sup>1</sup>
TPH as diesel (TPHd)	5,100	100 <sup>1</sup>
Benzene	15,000	1 <sup>2</sup>
Ethylbenzene	1,500	30 <sup>3</sup>
Toluene	200	40 <sup>3</sup>
Xylenes	2,170	20 <sup>3</sup>
Methyl Tertiary Butyl Ether (MtBE)	1,500	5 <sup>4</sup>
	<b>Maximum Concentration</b>	<b>Water Quality Objectives</b>

Constituent	(µg/L)	(µg/L)
Tertiary butyl alcohol (TBA)	62,000	12 <sup>5</sup>

1- USEPA Health Advisory 2- California Primary MCL 3- USEPA Secondary MCL 4- California Secondary MCL  
5 - California State Notification Level and Response Level for Drinking Water

These concentrations of petroleum constituents in groundwater are indicative of liquid-phase hydrocarbons and constitute “waste” as defined in Water Code section 13050. Although petroleum constituent concentrations have decreased in some Site wells, concentrations persist well above established WQOs.

12. This case is 20+ years old, having been opened in November 1990. Investigation and remedial efforts have not been satisfactorily completed

### AUTHORITY – LEGAL REQUIREMENTS

13. The Central Valley Water Board derives its authority to issue and enforce the legal requirements of this Order from California Law, Regulations, Policies, and Plans included in Attachment A, which is attached hereto and made part of this Order.
14. The constituents listed in Finding Nos. 5 and 11 are wastes, as defined in Water Code section 13050(d). The groundwater exceeds the WQOs for the constituents listed in Finding No. 11. Exceeding applicable WQOs is indicative of an impairment to the beneficial uses of the groundwater, and thereby constitutes a condition of pollution as defined in Water Code section 13050(l)(1).

### DISCHARGER LIABILITY

15. As described in Findings 1 through 12, the Dischargers are subject to an order pursuant to Water Code section 13304 because the Dischargers have caused or permitted waste to be discharged or deposited where it has discharged to waters of the state and has created, and continues to threaten to create, a condition of pollution or nuisance. The condition of pollution is a priority violation and issuance or adoption of a cleanup and abatement order pursuant to Water Code section 13304 and Health and Safety Code section 25296.10 is appropriate and consistent with policies of the Central Valley Water Board.
16. This Order requires investigation and cleanup of the Site in compliance with the California Water Code, the applicable Basin Plan, State Water Resources Control Board (“State Water Board”) Resolution No. 92-49, and other applicable Central Valley Water Board plans, policies, and regulations.
17. As described in Findings 1 through 12, the Dischargers are subject to an order pursuant to Water Code section 13267 to submit technical reports because existing data and information about the Site indicate that waste has been discharged, is discharging, or is suspected of discharging, at the property, which is or was owned and/or operated by the Dischargers named in this Order. The technical reports required by this Order are necessary to assure compliance with Water Code section 13304 and Health and Safety Code section 25296.10, including to adequately investigate and clean up the Site to protect the beneficial uses of waters of the state, to protect against nuisance, and to protect human health and the environment.

18. The issuance of this Order is an enforcement action taken by a regulatory agency and is exempt from the provisions of the California Environmental Quality Act ("CEQA")(Pub. Resources Code § 21000 et seq.), pursuant to California Code of Regulations ("CCR"), title 14, section 15321(a)(2). The issuance of this Order may also be considered an action by a regulatory agency for the protection of the environment, exempt pursuant to CCR, title 14, section 15308. The implementation of this Order may be considered a minor action to prevent, minimize, stabilize, mitigate, or eliminate the release or threat of release of hazardous waste or hazardous substances, exempt pursuant to CCR, title 14, section 15330.

### REQUIRED ACTIONS

**IT IS HEREBY ORDERED** that, pursuant to Water Code sections 13304 and 13267, and Health and Safety Code section 25296.10, the Dischargers shall:

1. Investigate the discharges of waste, clean up the waste, and abate the effects of the waste, forthwith, resulting from activities at 1501 East Monte Vista Avenue, Vacaville, Solano County, in conformance with State Water Board Resolution No. 92-49 *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* and with the Central Valley Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins* (in particular the Policies and Plans listed within the Control Action Considerations portion of Chapter IV). "Forthwith" means as soon as is reasonably possible. Compliance with this requirement shall include, but not be limited to, completing the tasks listed below.
2. Complete all work and reports in accordance with *Appendix A - Reports, Tri-Regional Recommendations for Preliminary Investigation and Evaluation of Underground Storage Tank Sites* (Appendix A - Reports), which is attached hereto and made a part of this Order. Complete all work under all permits required by State, County, and/or Local agencies.
3. If the Dischargers disagree with the Site History as summarized in Findings 1-12, and/or believe that other parties share responsibility for these discharges, submit a report by **30 January 2012**, which to the best of the Dischargers' abilities, documents the Site's history since the USTs were installed, including a chronology of the Site's ownership and operator history, any evidence detailing the time and origin of the release(s), and the fee title owner. Information in this report may be used to identify additional dischargers who may be added to this or future orders.
4. Submit a Feasibility testing/pilot study work plan by **24 February 2012**. DPE has already been shown to be effective so the work plan is to evaluate at least two additional remedial alternatives, and select one or more to be implemented. The work plan is to also include a cost comparison of all alternatives evaluated. And, the work plan is to include a schedule for installation, operation and reporting for all proposed feasibility testing.
5. Submit the report of results for the feasibility testing and a Corrective Action Plan (CAP) by **30 June 2012**. To include conclusions and recommendations to support the chosen

remedial alternative, complete details and schedule regarding the installation, start up, operation and monitoring for the remedial alternative.

6. Submit Remedial System Start Up Report by **19 October 2012**.
7. Submit Quarterly Monitoring Reports. Quarterly Monitoring Reports are due by the 30<sup>th</sup> day of the month following the end of the calendar quarter in which samples are collected, and the next Quarterly Monitoring Report is due by **30 January 2012**. Quarterly Monitoring Reports shall include the results of all soil, soil vapor and groundwater samples analyzed to date. While the wells to be sampled and the constituents to be analyzed during each monitoring event may be modified by Central Valley Water Board staff, until modified, all groundwater samples must be analyzed for the constituents and at their corresponding method reporting limits as listed in the table below.

<b>Groundwater Analytes</b>			
TPH-g	50 µg/l	Ethylbenzene	0.5 µg/l
TPH-d	50 µg/l	Total Xylenes	0.5 µg/l
Benzene	0.5 µg/l	MTBE	0.5 µg/l
Toluene	0.5 µg/l		

TPH-g & TPH-d - Total Petroleum Hydrocarbons as gasoline and TPH as diesel

The Quarterly Monitoring Reports must include an evaluation of the ongoing remedial effort, a discussion regarding the effectiveness of the remedial strategy, and recommendations regarding the Site's operating remedial system and remedial strategy.

8. Submit Remedial Status Reports, monthly for two months following system startup. The first monthly Remedial Status Report is due 30 days after system startup, but no later than **30 November 2012**. After the first two monthly remedial status reports are submitted, the Quarterly Monitoring Reports shall document all remedial work and sampling that occurred during the quarter reported.
9. Submit a Soil Vapor Investigation Work Plan by **30 September 2012** to install a network of shallow soil vapor wells and collect soil vapor samples. The soil vapor survey shall be adequate to evaluate the risk that contaminated soil vapor may pose to human health through migration to indoor air. Soil vapor samples should be collected within the top five feet of ground surface in a grid pattern across the identified hydrocarbon plume. To optimize detecting and delineating the extent of hydrocarbon vapors in soil, the grid spacing should include biased sampling locations (e. g., additional sampling locations near the former USTs, piping runs, estimated plume boundaries, and all nearby structures). The requested soil vapor survey should be prepared in accordance with the 28 January 2003 *Advisory – Active Soil Gas Investigations*, which is available from the website below.

[http://www.dtsc.ca.gov/lawsregspolicies/policies/SiteCleanup/upload/SMBR\\_ADV\\_activesoilgasinvst.pdf](http://www.dtsc.ca.gov/lawsregspolicies/policies/SiteCleanup/upload/SMBR_ADV_activesoilgasinvst.pdf)

The Soil Vapor Investigation Work Plan must also contain data tables outlining the depth and analytical results of every soil sample ever obtained from beneath the Site, along with a map depicting the location of each sample. Soil samples collected from an area that

was later excavated and removed are to be noted, along with the date the soil was removed from the subsurface.

- Submit a Soil Vapor Report documenting the results of the soil vapor investigation along with the results of a Human Health Risk Assessment (“HHRA”) by **30 November 2012**. The HHRA shall evaluate the risk all residual constituents remaining in soil and soil vapor beneath the Site may pose to human health. The HHRA shall estimate baseline carcinogenic risk and baseline toxic effects to residential receptors, evaluating dermal absorption, ingestion, and volatilization to indoor air exposure pathways. All constituent concentrations detected in soil within the top 10 feet of ground surface shall be considered when evaluating for dermal absorption and ingestion, and soil vapor data shall be considered when evaluating for volatilization to indoor air. A one-in-a-million target risk level and a target hazard index of one are to be used. Additionally, the unit risk factors and/or slope factors for all constituents incorporated into the HHRA must comply with the values listed in the Office of Environmental Health Hazard Assessment’s (OEHHA’s) Toxicity Criteria Database. TPH-g detections shall also be incorporated into the HHRA, which should be completed so that it can be adjusted easily and inexpensively as new Site data become available.

<b>Required Report Submittal Schedule</b>	
<b>Required Activities/Reports</b>	<b>Due Dates</b>
<b>Site History</b> (optional)	<b>30 January 2012</b>
<b>Feasibility Work Plan</b>	<b>24 February 2012</b>
<b>Feasibility Report of Results and CAP</b>	<b>30 June 2012</b>
<b>Remedial System Startup Report</b>	<b>19 October 2012</b>
<b>Quarterly Monitoring Reports</b>	First report due <b>30 January 2012</b> , all others due by the 30 <sup>th</sup> day of the month following the end of the calendar quarter in which samples are collected
<b>Remedial Status Reports</b>	<b>As directed in No. 8 above.</b>
<b>Soil Vapor Investigation Work Plan</b>	<b>30 September 2012</b>
<b>Soil Vapor Report and HHRA</b>	<b>30 November 2012</b>

### **GENERAL REQUIREMENTS**

Electronic copies of all reports and analytical results are to be submitted over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <http://geotracker.waterboards.ca.gov>.

Electronic copies are due to GeoTracker concurrent with the corresponding hard copy deliver to this office. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Board’s web site. Responsible Parties must submit all laboratory data obtained after September 1, 2001 to GeoTracker database. Responsible Parties must also submit locational data obtained after January 1, 2002 for all groundwater monitoring wells (i.e., latitude, longitude, and elevation survey data), groundwater well information (e.g., depth to free product, monitoring well status), and a site map.

Additional General Requirements are included in Attachment A of this Order.

If, in the opinion of the Executive Officer, the Dischargers fail to comply with the provisions of this Order, the Executive Officer may refer this matter to the Attorney General for judicial enforcement or may issue a complaint for administrative civil liability. Failure to comply with this Order may result in the assessment of an Administrative Civil Liability of up to \$10,000 per violation per day pursuant to the Water Code sections 13268, 13350 and/or 13385. The Central Valley Water Board reserves its right to take any enforcement actions authorized by law.

Any person aggrieved by this action of the Central Valley Water Board may petition the State Water Board to review the action in accordance with California Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the 30<sup>th</sup> day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at:

[http://www.waterboards.ca.gov/public\\_notices/petitions/water\\_quality](http://www.waterboards.ca.gov/public_notices/petitions/water_quality)

or they will be provided upon request.

This Order is effective upon the date of signature.

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*signed by Rick Moss for*

PAMELA C. CREEDON  
Executive Officer

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*signed 14 December 2011*

(Date)

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

CLEANUP AND ABATEMENT ORDER NO. R5-2011-0711  
FOR  
Azad Amiri, Ameri Oil Company, Inc., and Nut Tree Gas, Inc.  
SOLANO COUNTY

**ATTACHMENT A**  
**AUTHORITY – LEGAL REQUIREMENTS**  
and  
**GENERAL REQUIREMENTS**

**AUTHORITY – LEGAL REQUIREMENTS**

The following laws and regulations authorize the Central Valley Regional Water Quality Control Board (Central Valley Water Board) to issue Cleanup and Abatement Orders (CAOs) to persons who have participated in actions that have led to actual or threatened water pollution.

- I. Legal Authority over Responsible Parties/Dischargers: These laws and regulations give the Central Valley Water Board the legal authority to hold persons named in the accompanying Order responsible for cleanup activities.
  1. Section 13304(a) of the California Water Code states, in relevant part, that:

Any person who has discharged or discharges waste into waters of the state in violation of any waste discharge requirements or other order or prohibition issued by a regional board or the state board, or who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is, or probably will be, discharged into the waters of the state and creates, or threatens to create, a condition of pollution or nuisance, shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts.
  2. Section 13050(d) of the California Water Code defines “waste” to include:

... sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal.
  3. Sections 13050(l) and 13050(m) define “pollution” and “nuisance,” respectively, as follows:
    - (1) “Pollution” means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:



- (A) The waters for beneficial uses.
- (B) Facilities which serve these beneficial uses.
- (2) "Pollution" may include "contamination."

"Nuisance" means anything which meets all of the following requirements:

- (1) Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
  - (2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
  - (3) Occurs during, or as a result of, the treatment or disposal of wastes.
4. California Code of Regulations, title 23, section 2720, defines who is a "responsible party"<sup>1</sup> for the purposes of cleaning up contamination resulting from a leaking underground storage tank. This section states, in relevant part:
- "Responsible party" means one or more of the following:
- (1) Any person who owns or operates an underground storage tank used for the storage of any hazardous substance;
  - (2) In the case of any underground storage tank no longer in use, any person who owned or operated the underground storage tank immediately before the discontinuation of its use;
  - (3) Any owner of property where an unauthorized release of a hazardous substance from an underground storage tank has occurred; and
  - (4) Any person who had or has control over a underground storage tank at the time of or following an unauthorized release of a hazardous substance.
5. California Code of Regulations, title 23, section 2720, specifies that Responsible Parties shall comply with all California Water Code provisions and any Orders issued by a regional water board when an unauthorized release from an underground storage tank has occurred.

II. Legal Authority to Require Cleanup Activities/Corrective Actions: These laws and regulations describe the actions that may be required of persons named in Cleanup and Abatement Orders.

**1. General Cleanup Activities**

- i. Section 13304(a) of the California Water Code states, in relevant part, that:  

[Responsible parties] shall upon order of the regional board clean up the waste or abate the effects of the waste, or, in the case of threatened pollution or nuisance, take other necessary remedial action, including but not limited to, overseeing cleanup and abatement efforts.
- ii. Section 25296.10(a) of the Health and Safety Code provides that:

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<sup>1</sup> For the purposes of a cleanup at a site contaminated by a leaking underground storage tank, Responsible Parties may also be referred to as Dischargers.

Each owner, operator, or other responsible party shall take corrective action in response to an unauthorized release in compliance with this chapter and the regulations adopted pursuant to Section 25299.3.

2. **Replacement Water:** The Central Valley Water Board may require responsible parties to provide replacement water to others who have had their water supplies affected by pollutants.

i. Section 13304(a) of the California Water Code states, in relevant part, that:

A cleanup and abatement order issued by the state board or a regional board may require the provision of, or payment for, uninterrupted replacement water service, which may include wellhead treatment, to each affected public water supplier or private well owner.

ii. Section 13304(f) of the California Water Code states that:

Replacement water provided pursuant to subdivision (a) shall meet all applicable federal, state and local drinking water standards and shall have comparable quality to that pumped by the public water system or private well owner prior to the discharge of waste.

III. Legal Authority for Cost Reimbursement: The Central Valley Water Board has the legal right to require responsible parties to pay for cleanup actions undertaken by the state and to require payment of oversight costs pursuant to California Water Code section 13304(c)(1), which states that:

If waste is cleaned up or the effects of the waste are abated, or, in the case of threatened pollution or nuisance, other necessary remedial action is taken by any government agency, the person or persons who discharged the waste, discharges the waste, or threatened to cause or permit the discharge of the waste within the meaning of subdivision (a), are liable to that government agency to the extent of the reasonable costs actually incurred in cleaning up the waste, abating the effects of the waste, supervising cleanup or abatement activities, or taking other remedial actions.

IV. Legal Authority to Require the Submittal of Technical Reports: The Central Valley Water Board has broad authority to require responsible parties to submit technical reports, which may include workplans, the analytical results of investigation activities, and the site history for contaminated properties.

1. Section 13267(a) of the California Water Code states, in relevant part, that:

A regional board, in establishing or reviewing any water quality control plan or waste discharge requirements, or in connection with any action relating to any plan or requirement authorized by this division, may investigate the quality of any waters of the state within its region.

2. Section 13267(b)(1) of the California Water Code states that:

In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of

having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports.

3. Section 25296.10(c)(1) of the Health and Safety Code provides that:

...the owner, operator, or other responsible party shall prepare a work plan that details the corrective action the owner, operator, or other responsible party shall take to comply with the requirements of subdivisions (a) and (b) and the corrective action regulations adopted pursuant to Section 25299.3.

These code sections allow the Central Valley Water Board to impose the obligation to submit technical reports on responsible parties. In the main body of the Cleanup and Abatement Order, you can find the reasons why the Central Valley Water Board is requiring you to submit these reports, as well as a justification for requiring the reports that balances the need for the reports against the burden placed upon you for submitting the reports. If the Cleanup and Abatement Order involves the cleanup of toxic substances, including carcinogenic substances, then the need for these reports usually is very high.

V. GeoTracker: GeoTracker is a database that contains information about cleanup sites throughout the State. Under California Code of Regulations (CCR), title 23, sections 3890-3895, responsible parties must submit electronic laboratory analytical data (i.e., soil, soil gas, or water chemical analysis) and locational data (i.e., location and elevation of groundwater monitoring wells), to the State GeoTracker database. The regulations and other background information are available at <http://geotracker.waterboards.ca.gov>.

VI. Basin Plan: The Water Board's *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, 4<sup>th</sup> Edition* (hereafter Basin Plan) designates beneficial uses of the waters of the State, establishes water quality objectives (WQOs) to protect these uses, and establishes implementation policies to implement WQOs. The beneficial uses of the groundwater beneath sites governed by this attachment are domestic, municipal, industrial, and agricultural supply.

VII. Policies: The following policies contain provisions that must be adhered to by responsible parties conducting cleanup activities.

1. The State Water Resources Control Board (hereafter State Board) has adopted Resolution No. 92-49, the *Policies and Procedures for Investigation*

*and Cleanup and Abatement of Discharges Under Water Code Section 13304.* This Policy sets forth the policies and procedures to be used during an investigation or cleanup of a polluted site and requires that cleanup levels be consistent with State Board Resolution 68-16, the *Statement of Policy With Respect to Maintaining High Quality of Waters in California*. Resolution 92-49 and the Water Board's Water Quality Control Plan for the Sacramento and San Joaquin River Basins (4<sup>th</sup> Ed) (Basin Plan) establish the cleanup levels to be achieved. Resolution 92-49 requires the waste to be cleaned up to background, or if that is not reasonable, to an alternative level that is the most stringent level that is economically and technologically feasible in accordance with California Code of Regulations, title 23, section 2550.4. Any alternative cleanup level to background must (1) be consistent with the maximum benefit to the people of the state; (2) not unreasonably affect present and anticipated beneficial use of such water; and (3) not result in water quality less than that prescribed in the Basin Plan and applicable Water Quality Control Plans and Policies of the State Board.

2. Chapter IV of the Basin Plan contains the *Policy for Investigation and Cleanup of Contaminated Sites*, which describes the Central Valley Water Board's policy for managing contaminated sites. This Policy is based on Water Code Sections 13000 and 13304, the Title 27 CCR, Division 2, Subdivision 1 regulations, and State Water Board Resolution Nos. 68-16 and 92-49. The Policy includes site investigation, source removal or containment, information required to be submitted for consideration in establishing cleanup levels, and the bases for establishment of soil and groundwater cleanup levels.
3. The State Board adopted the *Water Quality Enforcement Policy*, which states in part: "*At a minimum, cleanup levels must be sufficiently stringent to fully support beneficial uses, unless the RWQCB allows a containment zone. In the interim, and if restoration of background water quality cannot be achieved, the CAO should require the discharger(s) to abate the effects of the discharge. Abatement activities may include the provision of alternate water supplies.*" (*Enforcement Policy*, p. 14.)

VIII. Specific Constituents of Concern: The following provisions are applicable to all cleanups involving the spill of gasoline constituents.

1. The wastes detected at the site are not naturally occurring, and some, one of which is benzene, are known human carcinogens. Pollution of groundwater with these wastes impairs or threatens to impair the beneficial uses of the groundwater.
2. Water Quality Objectives (WQOs) listed in the Basin Plan include numeric WQOs, e.g., state drinking water maximum contaminant levels (MCLs), and narrative WQOs, including the narrative toxicity objective and the narrative tastes and odors objective for surface and groundwater. Chapter IV of the Basin Plan contains the *Policy for Application of Water Quality Objectives*,

which provides that “[w]here compliance with narrative objectives is required (i.e., where the objectives are applicable to protect specified beneficial uses), the Central Valley Water Board will, on a case-by-case basis, adopt numerical limitations in orders which will implement the narrative objectives.” The numerical limits for the constituents of concern listed in the following table implement the Basin Plan WQOs.

Constituent	Limits	WQO	Reference
Total Petroleum Hydrocarbons as Gasoline	5 µg/l	Health	USEPA Health Advisory
Benzene	1 µg/l	Toxicity	California Primary MCL,
Toluene	40 µg/l	Taste and Odor	USEPA Secondary MCL
Ethylbenzene	30 µg/l	Taste and Odor	USEPA Secondary MCL
Xylene	20 µg/l	Taste and Odor	USEPA Secondary MCL
TBA	12 µg/l	Toxicity	California Notification Level (DPA)
MTBE	5 µg/l	Taste and Odor	California Secondary MCL

ug/L= micrograms per liter

### **GENERAL REQUIREMENTS**

The following requirements are applicable for all sites in which the Central Valley Water Board issues Cleanup and Abatement Orders addressing the cleanup of gasoline constituents. If a Responsible Party subject to a Cleanup and Abatement Order fails to comply with the provisions of this Order, the Assistant Executive Officer may refer this matter to the Attorney General for judicial enforcement and/or may issue a complaint imposing administrative civil liability.

1. As required by the California Business and Professions Code Sections 6735, 7835, and 7835.1, Responsible Parties must have appropriate reports prepared by, or under the supervision of, a registered professional engineer or geologist and signed, and where necessary stamped, by the registered professional. All technical reports submitted by the Responsible Parties shall include a cover letter signed by the responsible parties, or authorized representatives, certifying under penalty of law that the signer has examined and is familiar with the report and that to their knowledge, the report is true, complete, and accurate. The Responsible Parties shall also state if they agree with any recommendations or proposals and whether they approved implementation of said proposals.
  
2. Upon startup of any remediation system(s), Responsible Parties must operate the remediation system(s) continuously, except for periodic and required maintenance or unpreventable equipment failure. The Responsible Parties shall notify the Central Valley Water Board within 24 hours of any unscheduled shutdown of the remediation system(s) that lasts longer than 48 hours. This notification shall include the cause of

the shutdown and the corrective action taken (or proposed to be taken) to restart the system. Any interruptions in the operation of the remediation system(s), other than for maintenance, emergencies, or equipment failure, without prior approval from Central Valley Water Board staff or without notifying the Central Valley Water Board within the specified time is a violation of this Order. Within 7 working days of a shutdown, the Responsible Parties shall submit a Technical Report containing at a minimum, but not limited to the following information:

- Times and dates equipment were not working.
  - Cause of shutdown.
  - If not already restarted, a time schedule for restarting the equipment.
  - A Cleanup Assurance Plan to ensure that similar shutdowns do not reoccur. Proposed Cleanup Assurance Plans are to be completed within 30 days of the system shutdown.
3. Responsible Parties must notify Central Valley Water Board staff at least three working days prior to any onsite work, testing, or sampling that pertains to environmental remediation and investigation and is not routine monitoring, maintenance, or inspection.
  4. Responsible Parties must obtain all local and state permits and access agreements necessary to fulfill the requirements of this Order prior to beginning work.
  5. Responsible Parties must continue any remediation or monitoring activities until the Assistant Executive Officer determines that sufficient cleanup has been accomplished to fully comply with this Order and this Order has been either amended or rescinded in writing.
  6. Responsible Parties must optimize remedial systems as needed to improve system efficiency, operating time, and/or waste removal rates, and report on the effectiveness of the optimization in the quarterly reports.
  7. Responsible Parties must maintain a sufficient number of monitoring wells to completely define and encompass the waste plume(s). If groundwater monitoring indicates the waste in groundwater has migrated beyond laterally or vertically defined limits during the quarter, then the quarterly monitoring reports must include a work plan and schedule, with work to begin within thirty days of Central Valley Water Board staff approval, to define the new plume limits.
  8. Electronic copies of all reports and analytical results are to be submitted over the Internet to the State Water Board Geographic Environmental Information Management System database (GeoTracker) at <http://geotracker.waterboards.ca.gov>.

Electronic copies are due to GeoTracker concurrent with the corresponding hard copy deliver to this office. Electronic submittals shall comply with GeoTracker standards and procedures as specified on the State Board's web site. Responsible Parties must submit all laboratory data obtained after September 1, 2001 to GeoTracker database. Responsible Parties must also submit locational data obtained after January 1, 2002 for all groundwater monitoring wells (i.e., latitude, longitude, and elevation survey data), groundwater well information (e.g., depth to free product, monitoring well status), and a site map.

9. If the Responsible Parties are unable to perform any activity or submit any document in compliance with the schedule set forth herein, or in compliance with any work schedule submitted pursuant to this Order and approved by the Executive Officer, the Responsible Parties may request, in writing, an extension of the time specified. The extension request shall include justification for the delay. Any extension request shall be submitted as soon as the situation is recognized and no later than the compliance date. An extension may be granted by revision of this Order or by a letter from the Executive Officer. Extension requests not approved in writing by the Executive Officer with reference to this Order are denied.
10. All work and directives referenced in this Order are required regardless of whether or not the UST Cleanup Fund approves the work for reimbursement.