

California Regional Water Quality Control Board
North Coast Region

CLEANUP AND ABATEMENT ORDER NO. R1-2013-0018

For

GHOLAMI MICHAEL MOHAMMED & NAHID A TRUST

DBA ARCO A & M MINI MART

440 Hearn Avenue
Santa Rosa

Case No. 1TSR150

Sonoma County

The California Regional Water Quality Control Board, North Coast Region, (hereinafter Regional Water Board), finds that:

1. The property located at 440 Hearn Avenue in Santa Rosa, California (hereinafter Site) is the location of a retail gasoline station that has reportedly operated since the mid-1960s. Sonoma County Assessor's records designate the Site as Assessor's Parcel Number (APN) 043-101-050. Grant Deed 84010994, recorded on February 21, 1984 names Mohammad Gholami as grantee of title to the Site. The Assessor's records identify the current owner of the Site as "GHOLAMI MICHAEL MOHAMMED & NAHID A TR, DBA ARCO A & M MINI MART." The Gholami Michael Mohammed & Nahid A Trust is hereinafter referred to as the Discharger.
2. Historic operations at the Site include the use of petroleum underground storage tanks, product distribution piping, and fuel dispenser pumps.
3. On April 12, 1990, the Santa Rosa Fire Department reported the discovery of petroleum discharges that were revealed during the removal of underground storage tanks from the Site.
4. Investigations conducted at the site since September 1993 document the presence of petroleum constituents in soil and groundwater beneath the Site and off-site to the north and west along Hearn Avenue. Laboratory analysis of soil and groundwater samples identifies the presence of gasoline, diesel, benzene, toluene, ethylbenzene, xylene, methyl tertiary butyl ether, and tertiary butyl alcohol. Groundwater sampling and analysis conducted in September 2011 identified gasoline-range petroleum hydrocarbons and benzene in groundwater at levels up to 17,000,000 micrograms per liter ($\mu\text{g}/\text{L}$) and 37,000 $\mu\text{g}/\text{L}$, respectively.
5. Between September 1993 and October 2002, the Discharger installed thirty-two groundwater monitoring wells and advanced at least thirty-seven borings for soil and

groundwater sampling. Periodic groundwater monitoring and reporting were conducted from approximately November 1993 to March 2008.

6. Between November 2002 and January 2003, the Discharger installed three vapor extraction wells and conducted pilot testing for soil vapor extraction.
7. In February 2004, Regional Water Board staff concurred with implementation of a plan to use both groundwater extraction and soil vapor extraction (SVE) as the Corrective Action Plan (CAP) for the Site. Between February 2004 and July 2005, the Discharger installed a shallow-zone groundwater capture trench, three intermediate-zone groundwater extraction wells, and a treatment system for extracted groundwater and vapor.
8. The groundwater and soil vapor extraction systems operated intermittently from approximately January 2005 to November 2008. Technical problems have prevented the SVE portion of the remediation system from working effectively.
9. In September 2009, the Discharger ceased operating groundwater and soil vapor extraction systems and discontinued groundwater monitoring and reporting. In a letter dated May 26, 2011, Regional Water Board staff requested the Discharger to submit an updated CAP by June 11, 2011, and to resume groundwater analysis and reporting for eleven specified monitoring wells. At this time, the updated CAP has not been submitted and groundwater monitoring occurred once in 2011.
10. SOMA Environmental Engineering Inc. (SOMA) submitted an engineering assessment of the SVE system on behalf of the Discharger in the "Third Quarter 2011 Groundwater Monitoring and Groundwater and Soil Remediation Report," dated October 24, 2011. In the report, SOMA identifies several problems with the soil vapor extraction (SVE) and concludes that: "The original SVE system is not suitable for the site due to the impact of upwelling and intrusion of surface water into the vapor extraction wells."
11. The Site is located in the Colgan Creek watershed, tributary to the Laguna de Santa Rosa and the Russian River. Existing and potential beneficial uses of areal groundwater include domestic, irrigation, and industrial supply. Beneficial uses of Colgan Creek, the Laguna de Santa Rosa and the Russian River are:
 - a. municipal and domestic supply
 - b. agricultural supply
 - c. industrial process supply
 - d. groundwater recharge
 - e. navigation
 - f. water contact recreation
 - g. non-contact water recreation
 - h. commercial and sport fishing
 - i. warm freshwater habitat
 - j. cold freshwater habitat
 - k. wildlife habitat

- l. migration of aquatic organisms
 - m. spawning, reproduction, and/or early development
 - n. fresh water replenishment
 - o. estuarine habitat
 - p. rare, threatened or endangered species.
12. The Discharger has caused or permitted, causes or permits, or threatens to cause or permit 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. Continuing discharges are in violation of the Porter-Cologne Water Quality Control Act and provisions of the Water Quality Control Plan for the North Coast Region (Basin Plan).
13. The California Water Code (CWC), and regulations and policies developed thereunder apply to the Site and require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Discharge prohibitions contained in the Basin Plan also apply to this site. Specifically, the Basin Plan incorporates State Water Resources Control Board (State Water Board) Resolutions No. 68-16, No. 88-63, and No. 92-49.
- a. Sections 13267(b) of the CWC authorizes the Regional Water Boards to require dischargers and suspected dischargers to provide technical or monitoring program reports.
 - b. Section 13304 of the CWC authorizes the Regional Water Boards to require dischargers to cleanup and abate the effects of discharged waste.
 - c. State Water Board Resolution No. 68-16 (“State of Policy with Respect to Maintaining High Quality Waters in California”) requires that cleanup and abatement activities provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored.
 - d. State Water Board Resolution 88-63 requires Regional Water Boards to protect the beneficial use of groundwater as a source of drinking water. The Basin Plan establishes the beneficial use of groundwater as a source of drinking water for all areas within the North Coast Region. The Basin Plan identifies water quality objectives for petroleum constituent levels in groundwater to protect its beneficial use as a source of drinking water.
 - e. State Water Board Resolution No. 92-49 (“Policies and Procedures for the Investigation and Cleanup of Discharges Under Section 13304 of the California Water Code”) species that alternative cleanup levels greater than background concentration shall be permitted only if the discharger demonstrates that: it is not feasible to attain background levels; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and

they will not result in water quality less than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Board.

14. Water quality objectives in the Basin Plan are adopted to ensure protection of the beneficial uses of water. The most stringent water quality objectives for protection of all beneficial uses are selected as the protective water quality criteria. Alternative cleanup and abatement actions must evaluate the feasibility of, at a minimum: (1) cleanup to background levels, (2) cleanup to levels attainable through application of best practicable technology, and (3) cleanup to the level of water quality objectives for protection of beneficial uses. A table of applicable Water Quality Objectives for groundwater is incorporated in this Order as Attachment A.
15. The Regional Water Board will ensure adequate public participation at key steps in the remedial action process, and shall ensure that concurrence with a remedy for cleanup and abatement of the discharges at the site shall comply with the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA").
16. The issuance of this Cleanup and Abatement Order is an enforcement action being taken for the protection of the environment and, therefore, is exempt from the provisions of CEQA in accordance with Sections 15308 and 15321, Chapter 3, Title 14 of the California Code of Regulations.
17. Any person affected by this action of the Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Section 13320 of the California Water Code and Title 23, California Code of Regulations, Section 2050. The petition must be received by the State Water Board within 30 days of the date of this Order. Copies of the law and regulations applicable to filing petitions will be provided upon request. In addition to filing a petition with the State Water Board, any person affected by this Order may request the Regional Water Board to reconsider this Order. To be timely, such request must be made within 30 days of the date of this Order. Note that even if reconsideration by the Regional Water Board is sought, filing a petition with the State Water Board within the 30-day period is necessary to preserve the petitioner's legal rights. If the Dischargers choose to appeal the Order, the Dischargers are advised that they must comply with the Order while the appeal is being considered.
18. This Cleanup and Abatement Order (CAO) in no way limits the authority of this Regional Water Board to institute additional enforcement actions or to require additional investigation and cleanup at the Site consistent with California Water Code. This CAO may be revised by the Executive Officer, as additional information becomes available.
19. Failure to comply with the terms of this Order may result in enforcement under the California Water Code. Any person failing to provide technical reports containing information required by this Order by the required date(s) or falsifying any information in the technical reports is, pursuant to CWC Section 13268, guilty of a misdemeanor and may be subject to administrative civil liabilities of up to one

thousand dollars (\$1,000.00) for each day in which the violation occurs. Any person failing to cleanup or abate threatened or actual discharges as required by this Order is, pursuant to CWC Section 13350(e), subject to administrative civil liabilities of up to five thousand dollars (\$5,000.00) per day or ten dollars (\$10) per gallon of waste discharged.

THEREFORE, IT IS HEREBY ORDERED that, pursuant to California Water Code Sections 13267(b) and 13304, the Dischargers shall cleanup and abate the above-described discharge and threatened discharges forthwith according to the following directives of this Order:

- A. Conduct all investigative work under the direction of a California professional civil engineer or registered geologist experienced in soil and groundwater assessment and remediation. All work plans and reports must be stamped and signed by the licensed professional in responsible charge of the project.
- B. Conduct all engineering work, including treatment system design and installation, under the direction of a California professional civil engineer.
- C. Take no action that 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 waters of the state.
- D. Submit¹ by March 15, 2013 a report assessing the status of the groundwater extraction and treatment system, identifying any work needed to restore its effective operation.
- E. Implement any work needed to resume operation of the groundwater system no later than April 15, 2013.
- F. Resume operation of the groundwater extraction system by May 15, 2013 and operate it until water quality objectives for the site constituents of concern are achieved in groundwater.
- G. Submit by April 15, 2013 a conceptual site model (CSM) including a technical assessment of the CAP implementation infrastructure design. The CSM shall assess whether the existing CAP is adequate for removing contaminant sources and restoring water quality. If the existing CAP needs to be modified, a CAP addendum and workplan for implementing the needed work must be submitted with the CSM.
- H. Implement cleanup and abatement activities specified in the workplan submitted with the CSM required in Task G, or subsequently required by the Regional Water Board Executive Officer, within sixty days of the Executive Officer's concurrence with the workplan.

¹ For the purposes of this Order, the word "submit" means that the document must be received by the Regional Water Board on or before the associated deadline.

- I. Submit a report of work done pursuant to Tasks G and H within forty-five days of completing the work.
- J. Comply with the requirements specified in Monitoring and Reporting Program R1-2012-0118.
- K. Continue implementation of the existing CAP or subsequent revisions of the cleanup plan until Regional Water Board Executive Officer determines and communicates that system operation is no longer required.
- L. Complete any additional work deemed reasonably necessary by the Regional Water Board Executive Officer to abate and cleanup the discharge of waste.
- M. If, for any reason, the Dischargers are unable to perform any activity or submit any documentation in compliance with the work schedule contained in this Order or submitted pursuant to this Order and approved by the Executive Officer, the Dischargers may request in writing, an extension of time as specified. The extension request must be submitted 5 days in advance of the due date and shall include justification for this delay including the good faith effort performed to achieve compliance with the due date. The extension request shall also include a proposed time schedule with new performance dates for the due date in question and all subsequent dates dependent on the extension. A written extension may be granted for good cause, in which case the Order will be revised accordingly.

Original Signed By
Ordered by _____
Matthias St. John
Executive Officer
February 14, 2013

Table of Water Quality Objectives
For Selected Petroleum Related Constituents in Groundwater

CHEMICAL	COMMON MINIMUM DETECTION LEVEL	WATER QUALITY OBJECTIVE ¹	WATER QUALITY OBJECTIVE CITATION
Petroleum Hydrocarbons (as gasoline)	50 µg/L	5 µg/L	The TASTE AND ODOR threshold identified in published literature applied to the narrative water quality objective in the Basin Plan
Petroleum Hydrocarbons (as diesel)	50 µg/L	100 µg/L	US EPA Health Advisory, Suggested No Adverse Response Level applied to TASTE AND ODOR water quality objective in the Basin Plan
Benzene	0.5 µg/L	0.15 µg/L	California Public Health Goal in Drinking Water (Cal/EPA, OEHHA) applied to GENERAL water quality objective in the Basin Plan
Toluene	0.5 µg/L	42 µg/L	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan
Ethyl benzene	0.5 µg/L	3.2 µg/L	Cal/EPA Cancer Potency Factor applied to GENERAL water quality objective in the Basin Plan
Xylenes	0.5 µg/L	17 µg/L	US EPA National Ambient Water Quality Criteria, Human Health and Welfare Protection applied to TASTE AND ODOR water quality objective in the Basin Plan
Methyl tertiary butyl ether	0.5 µg/L	5 µg/L	California Department of Health Secondary MCL (taste & odor or welfare-based) applied to the narrative water quality objective in the Basin Plan
Tert-butyl alcohol	10 µg/L	12 µg/L	California Notification Level in Drinking Water (Department of Health Services) applied to GENERAL water quality objective in the Basin Plan

¹ The California Water Code, and regulations and policies developed there under require cleanup and abatement of discharges and threatened discharges of waste to the extent feasible. Cleanup and abatement activities are to provide attainment of background levels of water quality or the highest water quality that is reasonable if background levels of water quality cannot be restored. Alternative cleanup levels less stringent than background concentration shall be permitted only if the discharger demonstrates that: it is not feasible to attain background levels; the alternative cleanup levels are consistent with the maximum benefit to the people of the State; alternative cleanup levels will not unreasonably affect present and anticipated beneficial uses of such water; and they will not result in water quality lower than prescribed in the Basin Plan and Policies adopted by the State and Regional Water Boards.