

Lahontan Regional Water Quality Control Board

August 8, 2014

The Thomas E. Erickson Trust
Attn: Thomas E. Erickson
1468 Ashbrook Circle
Medford, OR 97501

Mohammad Ahmad
Tahoe Tom's Gas Station
4029 Lake Tahoe Blvd
South Lake Tahoe, CA 96150

Lake Tahoe Investments LLC
Attn: Raman Singh
4029 Lake Tahoe Boulevard
South Lake Tahoe, CA 96150

CLEANUP AND ABATEMENT ORDER NO. R6T-2014-0070

I am issuing the enclosed Cleanup and Abatement Order (CAO) to cleanup and abate unauthorized discharge(s) of petroleum hydrocarbon discharges to groundwater from Tahoe Tom's gasoline station in South Lake Tahoe, El Dorado County.

The CAO requires the Dischargers to, among other requirements:

- Sample the motel water supply well and submit the results monthly to the Water Board, or provide drinking water to the Mark Twain Lodge
- Conduct corrective actions to cleanup groundwater contamination on- and off-site
- Implement an expanded monitoring and reporting program
- Provide replacement water if levels exceed drinking water standards

Compliance with these requirements is intended to result in protection of human health and restore the groundwater to drinking water standards. If you have questions or comments regarding this matter, please contact Lisa Dernbach at (530) 542-5424 or LDernbach@waterboards.ca.gov.


PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Enclosure: CAO No. R6T-2014-0070

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

CLEANUP AND ABATEMENT ORDER NO. R6T-2014-0070

**REQUIRING LAKE TAHOE INVESTMENTS, LLC,
MOHAMMAD AHMAD,
AND THE THOMAS E. ERICKSON TRUST
TO CLEAN UP AND ABATE THE EFFECTS OF THE
DISCHARGE OF PETROLEUM PRODUCTS
TO THE GROUNDWATERS OF THE
LAKE TAHOE HYDROLOGIC UNIT
AT THE TAHOE TOM'S GASOLINE STATION
LOCATED AT 4029 LAKE TAHOE BOULEVARD
IN SOUTH LAKE TAHOE**

_____ El Dorado County _____

The California Regional Water Quality Control Board, Lahontan Region (Water Board), finds:

1. This is a new Cleanup and Abatement Order issued to Lake Tahoe Investments, LLC, Mohammad Ahmad, and the Thomas E. Erickson Trust, for historical discharges of petroleum products at the Tahoe Tom's Gasoline Station. This new Order adds Lake Tahoe Investments, LLC and Tahoe Petroleum, Inc. as responsible parties because in 2008 they became the new owner of the site and operator of the underground storage tanks, respectively.
2. The Tahoe Tom's Gasoline Station (hereinafter referred to as the Facility) is located at 4029 Lake Tahoe Boulevard, South Lake Tahoe, El Dorado County (Assessor's Parcel Number 029-065-07).
3. On December 24, 2007, the Water Board issued Cleanup and Abatement Order No. R6T-2007-0038 (CAO). The CAO required Mohammad Ahmad as the site operator and the Thomas E. Erickson Trust as the site owner to clean up and abate the effects of petroleum products discharged from the underground storage tanks and associated piping to the groundwaters of the Lake Tahoe Hydrologic Unit at the Facility. Specifically, the CAO required implementation of remedial actions to abate MTBE (methyl tertiary butyl ether) and other volatile organic compounds (VOCs) contamination from threatening to adversely affect municipal and domestic drinking water supply wells and other beneficial uses. The CAO directed quarterly monitoring and reporting until remediation has achieved background levels of groundwater quality.

4. Between 2008 and 2013, the Dischargers conducted sporadic remediation at the site to reduce petroleum hydrocarbons in soil in and around the underground storage tank basin. Most of the remedial actions involved the injection of RegenOx compounds into three injection wells upgradient of the underground storage tank basin. This action added oxygen to the subsurface for in-situ remediation of hydrocarbons in soil and groundwater. Over time, hydrocarbon concentrations reduced in groundwater and the plume shrunk in size to mostly just the footprint of the Facility. Based on the positive results of remedial actions, the Water Board in July 2012 reduced the monitoring and reporting frequency at the site from four times per year to three times per year.
5. On August 15, 2013, the Water Board received the document, *Second Quarter 2013 Groundwater Monitoring Report* by LRM Consulting. The report showed significant increases in hydrocarbon concentrations in on-site wells VE-13 and RW-10 for VOCs, including MTBE, and total petroleum hydrocarbons (TPH) as gasoline.
6. On September 17, 2013, the Water Board issued Investigative Order No. R6T-2013-0080 to Mr. Mohammad Ahmad at the Facility address. The order stated the Second Quarter 2013 Groundwater Monitoring Report was incomplete and that the significant increase in hydrocarbon concentrations in groundwater suggested a potential new release at the site. The order required submittal of missing quarterly monitoring report information. It also required that ethanol analysis be included in water samples collected during the next sampling event to evaluate whether recent leaks occurred at the site. Items in the order were complied with by LRM Remediation by deadlines listed.
7. On March 4, 2014, the Water Board issued Investigative Order No. R6T-2014-0018 to Mr. Mohammad Ahmad at the Facility address based on information in the Fourth Quarter 2013 Groundwater Monitoring Report, dated January 2014. Laboratory results of monitoring well samples from RW-10 and VE-13 showed hydrocarbon concentrations increasing in both locations. The lack of ethanol detection indicated the contamination was not from recent releases but from historical releases. The order required submittal of technical reports for (1) a remediation plan for soil and groundwater contamination and soil vapors, (2) to include ethanol analysis in the first tri-annual monitoring report, (3) collect a water sample from the Mark Twain Lodge well and report the results in future monitoring reports, and (4) provide written notification within two days of starting to operate the remediation system on site.
8. On March 20, the Water Board received a pilot test workplan from LRM Remediation for the responsible parties in response to Investigative Order No. R6T-2014-0018. The workplan proposed to perform interim remediation at the site using a mobile high-vacuum dual phase extraction (HVDPE) unit. The pilot test will be implemented at on-site wells RW-10 and VE-13 near the underground storage tank basin to remove hydrocarbons in soil, groundwater and vapor.

Implementation will consist of system startup and shakedown followed by a 3-month pilot test. Due to permitting and construction timeframes for a sewer connection and air emissions, the workplan lists a start date of June 30, 2014, and requests a deadline extension from the April 30, 2014 date in the Water Board's March 4, 2014 Investigative Order. The workplan and schedule were accepted in the Water Board's letter dated April 24, 2014 with the condition to conduct a round of RegenOx injection into wells RW-10 and VE-13 by April 30, 2014. An electronic message from LRM remediation indicated the RegenOx injections had been completed by the deadline.

9. The Second Quarter 2014 Groundwater Monitoring Report provides the results of groundwater sampling on April 29, 2014. The Report shows petroleum constituents at concentrations exceeding drinking water objectives collected from wells on the Facility property. The highest reported concentrations are as follows:

Benzene	1200 µg/L
Toluene	4,100 µg/L
Ethylbenzene	1,300 µg/L
Xylenes	8,100 µg/L
MTBE	12 µg/L
Total Petroleum Hydrocarbons (Gasoline)	46,000 µg/L

Laboratory results of a water sample obtained from off-site monitoring well MW-16M showed a detection of 74 µg/L MTBE. This monitoring well is located in the driveway for the property at 979 Park Avenue, 200 feet north of the underground storage tank basin at the Facility.

10. Since 2012, water samples collected at the Mark Twain Lodge, located at 947 Park Avenue, have detected MTBE in the domestic supply well:

Date	MTBE (µg/L)
9/12/2012	0.71
9/30/2013	1.3
4/29/14	11
5/21/14	6.3

The domestic supply well is located about 600 feet to the north of the Facility and 390 feet northeast of MW-16M.

11. On June 24, 2014, Water Board staff collected a water sample from domestic well at the Mark Twain Lodge at 947 Park Avenue. The sample was taken due to the increase in summer temperature and to increased water use at the lodge. A July 7, 2014 laboratory report by E.S. Babcock, listed MTBE at 12 µg/L. No other petroleum hydrocarbons were detected in the water sample.

12. Based on water sample results described in Finding No. 7, no new unauthorized release of petroleum hydrocarbons is indicated at the Facility. The indication of the release being historical is based on the presence of MTBE which has not been in California gasoline since 2004. Also, the lack of ethanol indicates the release is not from modern gasoline. The water table has lowered by as much as 4 feet since 2011 and is currently found about 18 feet below ground surface at the Facility. This lowering has resulted in higher dissolved concentrations in groundwater.
13. A visit to the Facility by Water Board staff on July 1, 2014 revealed no remediation to be in operation. When contacted on July 2, 2014, LRM Remediation stated the HVDPE system had been installed the previous week and that water and vapor samples still needed to be collected for review by the South Tahoe Public Utility District and the El Dorado County Air Quality Management District. Following acceptance by these agencies, the mobile system will operate full time. Thus, the discharger did not meet the June 30, 2014 deadline extension approved by Water Board staff and the start of continuous operation of the HVDPE is unknown.
14. The 2007 CAO listed the Thomas E. Erickson Trust as the owner of the Facility and Mr. Mohammad Ahmad as the operator of the underground storage tanks on the permit issued by the El Dorado County Department of Environmental Management. It is appropriate to list both parties as responsible parties in this order since the contamination from that time period remains on and off-site and continues to adversely affect groundwater quality for beneficial uses.
15. According to El Dorado County property records, the Lake Tahoe Investments, LLC, became the owner of the Facility by September 2008. The agent for service of process is Mr. Raman Singh at the Facility's address. As the owner of the Facility, the Lake Tahoe Investments, LLC is an appropriate responsible party pursuant to California Code of Regulations, title 23, section 2720. According to El Dorado County Department of Environmental Management, Tahoe Petroleum, Inc. is listed as the operator of the underground storage tanks on the permit issued for the Facility. The agent for service of process is also listed as Mr. Raman Singh at the Facility's address. Consequently, the Lake Tahoe Investments, LLC and Tahoe Petroleum, Inc. are properly added as responsible parties subject to this order.
16. The beneficial uses of groundwater in the area as designated in the 1995 Water Quality Control Plan for the Lahontan Region (Basin Plan) include municipal and domestic supply, agricultural supply, fresh water replenishment, and industrial service supply.
17. Active supply wells near the Facility located in the downgradient groundwater flow direction include:

- Mark Twain Lodge well (600 feet to the north),
- Best Western Station House Inn well (1,100 feet to the north),
- Lakeside Mutual Water Company well at 4074 and 4077 Pine Boulevard (1,200 feet to the north),
- Alpenrose, 4074 Pine Blvd, approximately 1,100 feet to the north,

These wells are active and located approximately downgradient, hence the need to continue groundwater investigations in this area.

18. The 1995 Basin Plan established water quality objectives for the protection of beneficial use. Those objectives include the following Maximum Contaminant Levels (MCLs) and Action Levels (ALs) that have been established by the California Department of Public Health as safe levels to protect public drinking water supplies:

Benzene	1 µg/L (MCL)
Toluene	150 µg/L (MCL)
Ethylbenzene	300 µg/L (MCL)
Xylenes	1,750 µg/L (MCL)
MTBE	13 µg/L (MCL)

The Basin Plan contains the following narrative taste and odor objectives for the Lake Tahoe Hydrologic unit:

Groundwaters shall not contain taste and odor-producing substances in concentrations that cause nuisance or that adversely affect beneficial uses. For ground water designated as municipal and domestic supply, at a minimum, concentrations shall not exceed secondary maximum contaminant levels specified in... Title 22 of the California Code of regulations which is incorporated by reference into this plan.

The following Taste and Odor Thresholds (TOT) are adopted as secondary water quality goals by the United States Environmental Protection Agency or the California Department of Public Health for drinking water. Petroleum concentrations above these levels would violate the taste and odor objective in the Basin Plan:

Toluene	42 µg/L (TOT)
1,3,5-Trimethylbenzene	15 µg/L (TOT)
Ethylbenzene	29 µg/L (TOT)
Xylenes	17 µg/L (TOT)
MTBE	5 µg/L (TOT)
Total Petroleum Hydrocarbons (Gasoline)	50 µg/L (TOT)

19. The concentrations of benzene, toluene, ethylbenzene, xylenes, MTBE, and total petroleum hydrocarbons as gasoline detected in groundwater samples taken from wells on and off the Facility and referenced in Finding No. 9 exceed water quality objectives for the groundwater specified in the Basin Plan, as listed in Finding No. 17. These concentrations adversely affect the groundwater for the beneficial uses, as listed in Finding No. 15.
20. The level of wastes in groundwater at the Facility constitute a pollution as defined in Water Code section 13050, subdivision (l); 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; or (b) facilities which serve these beneficial uses.
21. The discharge of petroleum products to the groundwaters of the Lake Tahoe Hydrologic unit as described in Finding No. 9 violates a prohibition contained in the Basin Plan. Specifically, the discharge violates and threatens to violate the following discharge prohibition:

“The discharge of waste...as defined in section 13050(d) of the California Water Code which would violate the water quality objectives of this plan, or otherwise adversely affect the beneficial uses of water designated by this plan, is prohibited.”

Authority – Legal Requirements

22. California Water Code section 13304, subdivision (a) states in part:

Any person...who has caused or permitted, causes or permits, or threatens to cause or permit any waste to be discharged or deposited where it is...discharged into 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...

23. Pursuant to Water Code section 13304, subdivision (f):

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.

24. California Water Code section 13267, subdivision (b) states in part:

In conducting an investigation [of the quality of any waters of the state within its region] the regional board may require any person who has

discharged waste within its region...[to] furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires.

This Order requires the submittal of workplans, monitoring data, and reports, mainly to document that the replacement water service meets all regulatory requirements.

25. Pursuant to Water Code section 13304, the Water Board is entitled to, and may seek, reimbursement for all reasonable costs actually incurred by the Water Board to investigate unauthorized discharges of wastes or to oversee cleanup of waste, abatement of the effect thereof, or other remedial action pursuant to this Order.
26. The Discharger is required to abate the effects of its discharge in accordance with Water Code section 13304. This includes providing uninterrupted replacement water service to all impacted municipal and domestic or community wells. Replacement water service shall have comparable quality to the water pumped prior to the well being affected by the discharge of the waste.
27. Impacted wells are defined as domestic or community supply wells containing any petroleum hydrocarbon constituent in concentrations (measured at any time) that are above the primary maximum contaminant level or, if no primary maximum contaminant level exist, the secondary drinking water standard.
28. Detected petroleum hydrocarbons in a water supply well justify a short timeframe for completing corrective actions, monthly sample collection at impacted supply wells, and monitoring and reporting at a quarterly frequency (once every three months).
29. This enforcement action is being taken by this regulatory agency to enforce the provisions of the California Water Code and as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code section 21000 et. seq.) in accordance with California Code of Regulations, title 14, section 15321.

ORDERS

THEREFORE, IT IS HEREBY ORDERED that pursuant to Water Code sections 13267 and 13304, the Lake Tahoe Investments, LLC, Tahoe Petroleum, Inc., Mr. Mohammad Ahmad, and the Thomas E. Erickson Trust (referred to hereafter as the “Dischargers”) shall clean up and abate the discharge and threatened discharge of petroleum hydrocarbons to waters of the State, and shall comply with the provisions of this order:

1. Orders listed in CAO No. R6T-2007-0038 are rescinded.
2. The Dischargers shall conduct the investigation and cleanup tasks listed below by or under the direction of a California licensed geologist or civil engineer experienced in the area of groundwater pollution cleanup. All technical documents submitted to the Water Board shall contain the signature and stamp of the licensed individual overseeing corrective actions.
3. Corrective Actions
 - 3.1. **Within 72 hours of the date of this Order**, start to operate a remediation system that has the ability to contain petroleum hydrocarbons from migration in groundwater from leaving the Facility property. The system can be that approved by the Water Board, as described in Finding No. 8, or an equally effective system that is able to meet this deadline. The system must operate continuously, defined as 90 percent of the time or more, on a monthly basis, unless prior approval is received by the Water Board Executive Officer.
 - 3.1.1. **Within one working day** of implementation, notify the Water Board.
 - 3.2. **Within 21 days of the date of this Order**, implement interim corrective actions at monitoring well MW-16M that have the ability to contain petroleum hydrocarbons from migration in groundwater from leaving that location at 979 Park Avenue. The interim action must operate continuously, defined as 90 percent of the time or more, on a monthly basis, unless prior approval is received by the Water Board Executive Officer.
 - 3.2.1. **Within one working day** of implementation, notify the Water Board.
4. Groundwater Monitoring and Reporting
 - 4.1. **By August 30, 2014 and quarterly (every three months) thereafter**, either (1) collect a water sample from the Mark Twain Lodge well and report the results in technical reports submitted to the Water Board within 16 days of the date of sampling or (2) provide continuous, interim drinking water, such as bottled water, to the lodge to accommodate parties in all rooms. If the first option is chosen, water samples must include analyses for VOC using EPA Method 8260B with a detection level of 0.5 µg/L and TPH-gasoline using

EPA Method 8015B with a detection level of 10 µg/L. If the second option is chosen, “continuous” is defined as providing interim drinking water to accommodate all parties in all rooms, every day, with a no more than twelve hour lapse in availability.

- 4.1.1. **By October 15, 2014 and quarterly thereafter**, submit a technical report containing results of monthly water samples or the interim drinking water provided. If the first option in Order 4.1. is chosen, the report shall describe all sampling information, such as date, time, location, procedures, and laboratory results. The report must include copies of laboratory reports, chain of custody, and a table showing data over the past one year. If the second option in Order 4.1 is chosen, the report shall describe the type (such as brand name) of interim water supply provide, size or volume of container, the amount, and how the amount was determined. The report must also describe the process for providing additional interim water supply for future needs.
- 4.2. **By October 15, 2014, and quarterly thereafter**, conduct groundwater sampling at these on-site, vapor, and extraction well locations: MW-3, VE-12, VE-13, RW-1, RW-9A, RW-10. In addition, conduct groundwater sampling at these off-site monitoring and extraction well locations: MW-4, MW-6, MW-9, MW-10 MW-15D, MW-16M, MW-17, MW-17M, RW-7B. Monitoring wells that have not been sampled in three year need to have the well redeveloped. Also collect a water sample from the Best Western Station House well at 4074 Pine Boulevard or, if not operating, a sample from the Lakeside Park Water District at 4077 Pine Boulevard.
- 4.3. **By October 15, 2014, and quarterly thereafter**, submit a technical report to the Water Board describing groundwater monitoring results for the prior quarter. The report must contain the following information:
 - 4.3.1.1. Either a table of contents or an attachment list.
 - 4.3.1.2. Laboratory analytical results of water samples for the following constituents: TPH-gasoline using Method 8015 or its equivalent; all volatile and semi-volatile organic compounds using Method 8260 or its equivalent. Detection limits shall be no greater than 0.5 µg/L for volatile organic compounds and 10 µg/L for TPH as gasoline.
 - 4.3.1.3. A narrative description and analysis of all information provided.
 - 4.3.1.4. Potentiometric surface map for groundwater elevations in all monitoring wells. Show the ground water flow direction as an arrow on the map.
 - 4.3.1.5. Calculate horizontal hydraulic gradient.

- 4.3.1.6. Maps showing the location of all monitoring wells and boundary lines of the dissolved petroleum plume out to 1 µg/L benzene, 5 µg/L MTBE, and 50 µg/L TPH-gasoline.
- 4.3.1.7. Tabulate water analytical results and groundwater elevations for each well over time that includes all data collected since 2010.
- 4.3.1.8. Description of groundwater elevation trend from previous monitoring event.
- 4.3.1.9. Discussion of contaminant concentration trend in monitoring wells from previous monitoring event.
- 4.3.1.10. Description of all remedial actions taken in past quarter. Discuss operational data, such as rates, flow volume, laboratory data, etc.
- 4.3.1.11. Discussion of whether the dissolved petroleum plume is migrating, stable or reducing in size and concentration. Describe the basis for all conclusions.
- 4.3.1.12. Submittal of laboratory analytical data, ground water information, and monitoring well locations in Electronic Data Format to the State Water Resources Control Board Geotracker Database.
- 4.3.1.13. Identification of corrective actions planned during the next quarterly reporting period.
- 4.3.1.14. All figures shall be in color.

5. Impacts to Water Supply Well(s)

5.1. If at any time, water sample results from the Mark Twain Lodge well, or any other water supply well between the Facility and Lake Tahoe, should show a petroleum constituent exceeding the primary drinking water maximum contaminant level, or secondary drinking water standard if a primary standard does not exist, the Discharger must implement the following:

- 5.1.1. **Within 48 hours** of receipt of the laboratory report, provide continuous, interim drinking water, such as bottle water, to the lodge to accommodate parties in all rooms. “Continuous” is defined as providing interim drinking water to accommodate all parties in all rooms, every day, with a no more than twelve hour lapse in availability.
- 5.1.2. **Submit a proposal within 21 days** of the date on the laboratory report for providing permanent alternate water supply for all water uses at the well location. Describe at least three options and include the costs and time schedules for implementing each option. Provide a recommended option, explain the reasoning, and an implementation schedule.

5.1.3. **Impacted wells shall continue to be monitored in the quarterly Groundwater Monitoring and Reporting program as required in Order 4.3 above for at least four quarters even if water samples contain petroleum hydrocarbon constituents in concentrations that are below the primary maximum contaminant level or, if no primary maximum contaminant level exists, the secondary drinking water standard.**

6. **Within 48 hours** of submitting technical reports to the Water Board, upload the document, figures, and appendices, when applicable, to the Geotracker database at the Geotracker website: <http://geotracker.waterboards.ca.gov/>.
7. Any modification to this CAO shall be in writing and approved by the Executive Officer, including any potential deadline extensions. Any written extension request by the Dischargers shall include justification for the delay.

Failure to comply with the terms or conditions of this Order will result in additional enforcement action that may include the imposition of administrative civil liability pursuant to sections 13268 and 13350 of the Water Code or referral to the Attorney General of the State of California for such legal action as she may deem appropriate.

Ordered by: Patty Z. Kouyoumdjian Dated: 08/08/14
PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER