February 20, 2014

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STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

ORDER: WQ 2014 - ___ - UST

In the Matter of the Petition of

Arthur Zief Jr Foundation

For Review of Granting of Petroleum Underground Storage Tank Site Closure
At
2009 South El Camino Real, San Mateo, California

BY THE BOARD:

Petitioner Arthur Zief Foundation (Zief or Petitioner) seeks review of the San Mateo County (County) decision to close underground storage tank (UST) case 9-7863 (Chevron case) at 2009 South El Camino Real, a former Chevron gas station adjacent to Zief's property. For the reasons set forth below, this Order determines that Zief's claims have merit and the County is directed to re-open the Chevron case and direct further corrective action to investigate and remediate the unauthorized petroleum release affecting the Zief property.

APPLICABLE LAW

The State Water Board's Local Oversight Program (LOP) provides for local agency abatement of and oversight of the abatement of, unauthorized releases of hazardous substances from USTs. In implementing the LOP, the State Water Board is authorized to enter into contracts with local agencies to oversee site cleanup of unauthorized releases. (Health & Saf. Code, § 25297.1, subd. (b).) The County has a contract with the State Water Board and is participating in the LOP.

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Several statutory and regulatory provisions provide the State Water Board, regional water quality control boards (regional water boards), and local agencies with broad authority to require responsible parties to clean up a release from a petroleum UST. (See, e.g., Health & Saf. Code, § 25296.10; Wat. Code, § 13304, subd. (a).) The State Water Board has promulgated regulations specifying corrective action requirements for petroleum UST cases. (Cal. Code Regs., tit. 23, §§ 2720-2728.)

State Water Board Resolution 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* (Resolution 92-49) applies to petroleum UST cases. Resolution 92-49 establishes policies and procedures for investigation and cleanup and abatement of discharges under Water Code section 13304. Resolution 92-49 directs that water affected by an unauthorized release attain either background water quality or the best water quality that is reasonable if background water quality cannot be restored. (Resolution 92-49, Section III.G.) Any alternative level of water quality less stringent than background must be consistent with the maximum benefit to the people of the state, not unreasonably affect current and anticipated beneficial uses of affected water, and not result in water quality less than that prescribed in the water quality control plan for the basin within which the site is located. (*Ibid.*)

Resolution 92-49 does not require, however, that the requisite level of water quality be met at the time of site closure. Even if the requisite level of water quality has not yet been attained, a site may be closed if the level will be attained within a reasonable time frame. (Resolution 92-49, Section III. A.) Resolution 92-49 governs all investigations and cleanups under Water Code section 13304.¹

¹ On May 1, 2012, the State Water Board adopted Resolution 2012-0016, the Low-Threat Underground Storage Tank Case Closure Policy (Low-Threat Policy). This policy, which is also a state policy for water quality control, provides standard closure criteria for petroleum UST cases. If a petroleum UST case does not

The San Francisco Bay Water Quality Control Plan (Basin Plan) designates existing and potential beneficial uses of groundwater in the San Mateo area as municipal and domestic supply (MUN), agricultural supply (AGR), and industrial process supply (PROC). (San Francisco Bay Area and State Water Board, Water Quality Control Plan for the San Francisco Bay Area Region (1994).) The Basin Plan specifies a narrative taste and odor water quality objective for groundwater with an MUN beneficial use designation as follows: "Groundwaters shall not contain taste- or odor-producing substances at concentrations which cause nuisance or adversely affect beneficial uses." (*Id.* at p. 3-11.)

Any aggrieved person may petition the State Water Board for review of an action undertaken by a local agency in the LOP. (Health & Saf. Code, § 25297.1, subd. (h); State Water Board Resolution 88-23.) The State Water Board's petition procedures provide that if the State Water Board does not act on a petition within 270 days after receipt, the petition shall be deemed denied. (State Water Board Resolution 88-23.) The State Water Board may, on its own motion, review an LOP agency's action or failure to act. (See, Health & Saf. Code, § 25297.1, subd. (d)(3) [allowing procedures and Water Code section 13320] and Resolution 88-23, att. 2, ¶ 2(A).) The State Water Board is reviewing the petition on its own motion because the Board is reviewing the County's decision to close the case more than 270 days after receipt of the petition.

FACTUAL BACKGROUND

The Zief property is located at 20 East 20th Street in San Mateo County. The site is the location of a charitable foundation that serves disabled individuals. The site that is

meet the closure criteria in the Low-Threat Policy, regulatory agencies are required to consider case closure pursuant to Resolution 92-49. The County applied Resolution 92-49 because the Low-Threat Policy was not effective when the County issued its closure decision. Our review of whether the County's decision is consistent with the State Water Board's policies for water quality control is based upon the application of Resolution 92-49. Analyzing the case under the Low Threat Closure Policy, however, would not change the conclusion.

subject of the County's closure order is a former Chevron station located at 2009 El Camino Real and is located adjacent and upgradient to the Zief site. The Zief property has a below-grade parking structure and a retaining wall separates the Zief property from the Chevron property. A series of "weep" holes have been installed in the retaining wall. The former Chevron site is currently used as an oil change facility. Land use in the immediate vicinity is commercial.

In November 1993, Chevron removed fuel-related facilities from its site, including three 10,000-gallon USTs and one 1,000-gallon waste oil UST. Remedial actions consisted of excavation of 1,500 cubic yards of soil, excavation of an additional 600 cubic yards of soil that was used as on-site fill, and removal of 5,000 gallons of groundwater. The record shows that following Chevron's excavation and remediation activities, hydrocarbons remained in the soil in limited and localized areas. Three monitoring wells and 14 borings were installed at the site and quarterly monitoring continued from 1992 until 2009.

The lower level of the Zief parking structure is approximately 8 feet below grade level. A sump was installed in the parking structure to prevent groundwater from accumulating in the lower levels of the garage. Depth to groundwater at the former Chevron site has been observed to be 3.2 feet below grade to 10.22 feet below grade. The sump receives water from surface runoff from the garage, rain gutters, and groundwater.²

It is uncontested that hydrocarbon accumulation has been present in the below grade parking structure since at least 1998. After the City became aware of hydrocarbons in the sump, the City required Chevron to connect the sump to the sanitary sewer and obtain a waste discharge permit. In 1999, Chevron installed a groundwater remediation system to

² There is some dispute about how much water enters the sump from various sources, but the evidence, including records of volume of water discharged from the sump, suggests that a significant amount of groundwater enters the sump.

treat the groundwater present in the sump. It was discontinued after several months of use. In 2004, Zief installed an elevator on its property. Petroleum constituents were discovered during the associated excavation and Chevron disposed of 8 cubic yards of soil. Zief installed a "wet" well near the elevator shaft.

In pre-closure investigations, petroleum hydrocarbons were encountered in the elevator wet well and sump. Total petroleum hydrocarbons as gasoline (TPHg) was encountered in soil borings along the eastern portion of the Chevron property and trace amounts of methyl tertiary butyl ether (MTBE) were also encountered along the base of the retaining wall separating the Chevron property from the Zief property.

In November 2009, Chevron submitted a closure report to the County. The closure report summarized the site history including remedial actions taken and the results from monitoring wells on the Chevron site. The report did not identify any sensitive receptors near the former Chevron site. The report did note the sump located at the Zief site, but determined it was not a sensitive receptor because it was permitted by the City and was then discharging to the sanitary sewer within limits established by the City. Chevron reported maximum historical concentrations of 3,300 parts per billion (ppb) TPHg in 2004, and a recent maximum concentration of 1,300 ppb TPHg in the sump. ³ Zief objected to Chevron's request for closure citing concerns about the proposed sump discharge plan, odors in its parking structure and elevator area, and ongoing liability concerns due to the releases from the former Chevron site.

In February 2010, the County concurred with the closure request but asked for a detailed sump management plan prior to granting closure concluding that, "The sump is clearly encountering residual contamination from the subject site." The County

³ The monitoring wells were destroyed in 2010.

acknowledged that "[Zief] makes a correct statement that contaminants remain along the western and northern boundary of the site adjacent to the sidewalks and roadways and the exact extent of the contamination into the area of the sidewalk and roadway are not known." The County noted that the area adjacent to the retaining wall was left unexcavated for structural reasons and although the area was known to contain contaminants, the extent of the contamination did not warrant the significant expense of further excavation and investigation. The County concluded in a response to Zief's objections that "the concentrations of contaminants from groundwater leaching from the residual areas of contamination do not appear to negatively impact human health or the environment currently or in the anticipated future."

The County and Chevron continued discussions regarding closure of the site and the County eventually required Chevron to submit an addendum to its sump management plan to address the ongoing discharges to the sanitary sewer. In January 2011, the City of San Mateo formally objected to the sump management plan addendum submitted by Chevron and stated that it did not plan to renew Chevron's City-issued waste discharge permit for discharges from the sump to the sanitary sewer. On January 18, 2011, the County confirmed completion of investigative work and corrective action for the Chevron site and closed the site. The San Francisco Bay Regional Water Quality Control Board (San Francisco Bay Water Board) concurred with the closure.

On February 15, 2011, Zief submitted a petition to the State Water Board challenging the County's decision to close the case. The Petition cited the lack of a sufficient approved sump management plan, Chevron's ongoing responsibility to manage the remaining

⁴ Zief submitted a petition to the State Water Board for review of the County's actions in June 2010. Zief claimed: 1) There were multiple areas of contamination on the Chevron site; 2) The site had not been properly characterized; and 3) Closure would allow continued hazardous discharges into the sanitary sewer. The State Water Board dismissed the Zief petition determining it was not ripe for review because the County had not yet closed the case.

petroleum constituents after closure was granted, and vapor concerns in its parking structure.

Both Chevron and the County responded to the Petition. Chevron acknowledged that hydrocarbons had been detected in the sump, but stated its belief that the sources were unknown, all closure criteria had been met, and there was no ongoing threat to public health, safety or the environment. The County stated that extensive monitoring had been completed, any remaining petroleum constituents would not pose a threat to human health or the environment, and closure was consistent with State Water Board policies and direction. The County acknowledged that sump discharges contained petroleum hydrocarbons but stated that because the discharges were covered by a City waste discharge permit, Zief's concerns should be considered a civil matter with Chevron and the City, and not a public health and safety concern.

In March 2012, the City investigated the site and requested that the State Water Board reopen the case. Chevron objected to the late submission from the City. A series of discussions occurred between Petitioner, Chevron, and the City between March 2012 and up to the present. The ongoing discussions can be summarized as an attempt by Chevron, the City, and Petitioner to reach an agreement on how discharges to the sanitary sewer system will be managed, and how Chevron will prevent petroleum contaminated groundwater from reaching the Zief sump and the below-grade level of the Zief parking structure.

Chevron objects to the comments submitted by the City as being untimely. Chevron points out that the comments were submitted after the usual deadline for submission of comments in response to a petition. The State Water Board may, however, extend the time for filing of responses. (Resolution 88-23, att. 2, \P 3.) Further, evidence before the State Water Board includes, among other things, any relevant evidence that, in the judgment of the State Water Board, should be considered to effectuate and implement the pilot program. (Id., \P (4)(D).) Moreover, at this point, the State Water Board is considering this matter on its own motion and not exclusively as part of the petition and its more limited record. All parties received the supplemental evidence submitted and have had an opportunity to comment on it.

Correspondence from the City dated September 3, 2013, requires Chevron to identify how the sump and elevator pit on the Zief property will be isolated from sources of petroleum contaminated groundwater. The City requires Chevron to submit a plan showing how storm water will be isolated from petroleum-contaminated groundwater, and a plan to eliminate petroleum discharges into the sanitary sewer system. Chevron's October 10, 2013 response to the letter acknowledges that groundwater from its former site potentially enters the Zief property and its storm water system, and proposes work to isolate the sump from petroleum-impacted groundwater. Chevron maintains that after the work is completed and pending confirmation sampling, further responsibility for any discharge from the Zief site to the storm or sanitary water system will be the responsibility of the property owner.

III. CONTENTIONS AND FINDINGS

A. Contentions

Zief contends that the past UST releases at the former Chevron site have not been successfully mitigated and result in a continued impediment to the ongoing enjoyment and use of its property. Zief further contends that the requirements for site cleanup set out by Resolution 92-49 have not been satisfied.

Zief's contentions have merit. The corrective action performed does not ensure the protection of human health, safety and the environment and is not consistent with applicable State Water Board polices.

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B. Discussion

1. Substantial Evidence shows that Chevron's Petroleum UST Release Continues to Unreasonably Impact the Zief property.

The County approved case closure on the basis that any residual petroleum in the subsurface from the former Chevron site would not pose a current or future threat to human health, safety, or the environment. Over ten years after soil excavation and remediation, gasoline-range hydrocarbon concentrations continue to be detected in the sump and wetwell on the Zief property, where it requires active management. Based on the evidence in the record, the threat to human health, safety, and the environment caused by the release of petroleum hydrocarbons from UST operations at the Chevron site has not been adequately and completely addressed through Chevron's site investigation, remedial actions, and subsequent monitoring activities.

Data collected at the Zief site, both in the wet well in the elevator area and the sump, show elevated concentrations of petroleum constituents. This indicates that residual petroleum hydrocarbons are still present in localized areas and are migrating through the subsurface to the Zief site. Chevron, the County, and the City have acknowledged that petroleum hydrocarbons are present in the Zief sump. The Board's inquiry into whether Chevron's UST case should have been closed is based on this undisputed fact and whether Chevron's assertion that the release has been adequately characterized and contained is supported.

The evidence suggests that petroleum contaminated groundwater from the former Chevron site continues to create unreasonable impacts to the neighboring Zief property.

Zief reports odor issues in its garage and contends that migration is partially occurring through weep holes in the retaining wall that separates its site from the former Chevron site.

In its May 2011 response to the Zief Petition objecting to closure, the County agreed that the area around the retaining wall that separates the former Chevron site from the Zief property likely contains unexcavated hydrocarbons.

Zief also objects to the ongoing maintenance and permitting related to the petroleum constituents in its sump. As acknowledged by both Chevron and the County, the groundwater from the former Chevron site that migrates to Zief's site creates additional responsibilities and liabilities for Petitioner, not the least of which is the continued need for a waste discharge permit issued by the City of San Mateo.⁶

In its September 3, 2013 letter to Chevron, the City determined that an ongoing discharge to the sanitary sewer is unacceptable, and Chevron must submit a plan that will eliminate petroleum-contaminated groundwater discharges from its site. In its October 10, 2013 correspondence, Chevron asserts it has a plan to isolate the sump from groundwater, and once that plan is implemented and its effectiveness confirmed, future discharges will be entirely Zief's responsibility.

This plan has not been implemented, and its effectiveness is unknown. In addition, Chevron makes no mention of how the wet well will be isolated from groundwater emanating from its site, and whether the weep holes in the retaining wall can be sealed to prevent groundwater migration to the Zief subsurface. Chevron is responsible for taking corrective action related to the unauthorized release of petroleum hydrocarbons from its property and substantial evidence shows that subsurface petroleum releases from the former Chevron site have adversely affected groundwater and created unreasonable impacts to the Zief property.

⁶ In its 2009 Closure Report, Chevron states that one of its remedial actions has been to discharge 1,400,000 gallons of petroleum hydrocarbon bearing groundwater from the Zief sump.

2. The Level of Site Cleanup is Not Consistent with Health and Safety Code Section 25296.10 and State Water Board Resolution 92-49.

Closure of a UST case is appropriate where the corrective action ensures the protection of human health, safety, and the environment and where the corrective action is consistent with: 1) Chapter 6.7 of the Health and Safety Code and implementing regulations; 2) Any applicable waste discharge requirements or other orders issued pursuant to Division 7 of the Water Code; 3) All applicable state policies for water quality control; and 4) All applicable water quality control plans. (Health & Saf. Code, § 25296.10.)

As discussed earlier, Resolution 92-49 does not require that the requisite level of water quality be met at the time of site closure. If a proposal submitted by the discharger has a substantial likelihood of achieving compliance with cleanup goals and objectives in a reasonable time frame, additional monitoring and cleanup activities are not required. Resolution 92-49, section III. A. authorizes concurrence with:

[a]ny investigative and cleanup and abatement proposal . . . which . . . ha[s] a substantial likelihood to achieve compliance, within a reasonable time frame, with cleanup goals and objectives that implement the applicable [basin plans and state policies], and which implement permanent cleanup and abatement solutions which do not require ongoing maintenance, wherever feasible.

In this case, Chevron's cleanup and abatement activities are not complete because residual petroleum constituents continue to unreasonably impact the Zief site, and its corrective action has not resulted in a permanent cleanup and abatement solution. This is not a case like the Board's other closure orders, where the UST site may be closed and no further action is required. (See, e.g., State Water Board Order 2013-0029-UST; State Water Board Order 2011-0010-UST; State Water Board Order 2009-0016-UST.) Instead,

Chevron's site requires on-going action by Zief and Chevron to actively manage the continuing hydrocarbon discharges to the neighboring property.

Significant amounts of residual petroleum hydrocarbons continue to be released from the Chevron site as evidenced by the City's requirement that discharges of petroleum contaminated groundwater to the sanitary sewer and storm sewer be eliminated by December 31, 2013. Chevron has proposed a plan to isolate the Zief sump from groundwater, but that plan has yet to be carried out and its effectiveness is unconfirmed. Chevron has not proposed any plan to eliminate petroleum contamination from reaching the Zief wet well, and has not addressed other possible migration pathways including the retaining wall weep holes.

As indicated above, pursuant to Resolution 92-49, a case may be closed if there is a substantial likelihood that basin plan requirements will be met within a reasonable time frame. (Resolution 92-49, section III.A.) The determination as to what constitutes a reasonable time frame must be based on an evaluation of all relevant factors including: site specific conditions, the extent and gravity of any threat to public health and the environment during the period required to meet basin plan objectives, and the probability that the affected water will be used during the period of impairment.

In its February 5, 2010 report submitted in support of closure, Chevron's consultant stated that water quality objectives in the sump will be met by 2029, which Chevron asserts is a reasonable period of time. What constitutes a reasonable period of time to meet water quality objectives is a site-specific determination. What may be reasonable for one site may

⁷ Chevron has submitted plans to both the City and Zief on a method to seal the sump from groundwater intrusions. If effective, this could partially resolve Petitioner's concerns about odor from the petroleum releases impacting use of its property, and the need for a waste discharge permit from the City to discharge sump water to the sanitary sewer. It is unknown whether this will completely address the impacts to Zief's property, however, and additional corrective action will likely be necessary to avoid additional unreasonable impacts to the Zief property.

not be reasonable for another. Based on the current use of the adjacent Zief property, the existence of the two receptors (the wet well and sump), and taking Chevron's consultant's estimate to be true, 20 additional years of continued petroleum residue on the adjacent parcel is not reasonable under the circumstances. The ongoing discharge to the sanitary sewer is unresolved and Chevron has not yet submitted a plan that is confirmed to eliminate the need for ongoing oversight and maintenance due to its past releases. When site-specific factors are considered we cannot find that water quality objectives will be met within a reasonable time.

Relying on natural attenuation at this site to meet water quality objectives is not appropriate at this time and given the factors identified above. The Zief property is an operating business, the impacts from Chevron's continued remediation activities create unreasonable burdens on the property owner and its users, including odor concerns, the need to provide access to Chevron for maintenance activities, and the responsibility to comply with regulatory requirements imposed by the City. Further, pursuant to the City's direction, to ensure discharges are discontinued to both the sanitary sewer and storm drain, Chevron will need continued access to the Zief property for an indeterminate period, including the use of monitoring equipment, pumps, and other improvements to monitor and possibly collect groundwater from the Zief site.

Based on information submitted in support of the petition, responses to the petition, and supplemental evidence submitted to the Board, we find that cleanup objectives will not be met within a reasonable time frame and Chevron's remedial actions have not implemented a permanent cleanup solution. Further corrective action to investigate, remediate, and abate the effects of the release are warranted.

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IV. FINDINGS AND CONCLUSIONS

- 1. USTs at the former Chevron site were removed sometime prior to 1993.
- 2. The adjacent Zief property is currently used as a commercial/residential building for the developmentally disabled.
- 3. Chevron conducted corrective action including removal and remediation of soil and ongoing monitoring at its site from 1992-2009.
- 4. Monitoring results from the sump and wet well on the adjacent property, and evidence of discharge from weep holes in the retaining wall separating the former Chevron site from the Zief site show that the Zief site has been unreasonably impacted by petroleum hydrocarbons released from the former Chevron site. The release of petroleum hydrocarbons has not been adequately characterized or remediated by Chevron.
- 5. The petroleum releases are affecting groundwater beneath the Zief site, which is interfering with Petitioner's use of its property by creating additional unreasonable responsibilities for Petitioner.
- 6. The City has required that the sump on the Zief property that discharges petroleum contaminated water to the sanitary sewer be covered by a Waste Discharge Permit. The City has required Chevron to submit a plan to prevent petroleum contaminated groundwater from flowing to the Zief site or being discharged to the sanitary or storm sewer systems. The City requires Chevron to show it can cease discharges to the sanitary sewer by December 31, 2013.
- 7. Using natural attenuation at this site to meet water quality objectives is not appropriate at this time given the factors identified above. Water quality objectives will not be met within reasonable time frame when considering site-specific factors, including the fact that the release is impacting Petitioner's sump and the lower level of its adjacent parking structure and remediation methods will require ongoing maintenance and oversight.
- 8. Additional corrective action is necessary to investigate, remediate and abate the effects of Chevron's unauthorized release.
- 9. The above conclusions are based upon site-specific information relative to this case.

V. ORDER

IT IS THEREFORE ORDERED that the Zief Petition be granted and that the County reopen the Chevron case. The County of San Mateo, in cooperation with the San Francisco Bay Water Board and City of San Mateo shall direct further corrective action to assess the extent of the unauthorized release and to remediate and abate the effects of the release.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on -----, 2014.

AYE:

NO:

ABSENT:

ABSTAIN:

Jeanine Townsend Clerk to the Board