

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER: WQ 98 - 12 UST

In the Matter of the Petition of
UNOCAL CORPORATION
for Review of Denial of
Petroleum Underground Storage Tank Site Closure
at
7290 Monterey Street, Gilroy, California.

BY THE BOARD:

UNOCAL Corporation (petitioner) seeks review of the decision of the Santa Clara Valley Water District (District) not to close petitioner's case involving an unauthorized release of petroleum at its site located at 7290 Monterey Street, Gilroy, California. For the reasons set forth below, this order determines that petitioner's case should be closed and no further action related to the release should be required.

I. STATUTORY, REGULATORY, AND FACTUAL BACKGROUND

Tank owners and operators who are eligible for reimbursement from the Underground Storage Tank (UST) Cleanup Fund can petition the Fund Manager for a review of their case if they feel the corrective action plan for their site has been satisfactorily implemented, but closure has not been granted (Health and Saf. Code, § 25299.39.2, subd. (b)).¹

Several statutory and regulatory provisions provide the State Water Resources Control Board (SWRCB), Regional Water Quality Control Boards (RWQCBs), and local agencies with broad authority to require responsible parties to clean up a release from a petroleum UST (e.g., Health & Saf. Code, § 25299.37; Wat. Code, § 13304, subd. (a)). The

¹ To the extent that the SWRCB may lack authority to review this petition pursuant to Health and Safety Code section 25299.39.2, subdivision (b) because the petitioner did not submit a corrective action plan for the site, the petition is being reviewed on the SWRCB's own motion pursuant to Health and Safety Code section 25297.1, subdivision (d) and SWRCB Resolution No. 88-23.

District has been designated as an agency to participate in the local oversight program for the abatement of, and oversight of the abatement of, unauthorized releases of hazardous substances from USTs. (Health & Saf. Code, § 25297.1) The SWRCB has promulgated regulations specifying corrective action requirements for petroleum UST cases (Cal. Code of Regs., tit. 23, §§ 2720-2728). The regulations define corrective action as "any activity necessary to investigate and analyze the effects of an unauthorized release, propose a cost-effective plan to adequately protect human health, safety and the environment and to restore or protect current and potential beneficial uses of water, and implement and evaluate the effectiveness of the activity(ies)." (Cal. Code Regs., tit. 23, § 2720). Corrective action consists of one or more of the following phases: (1) preliminary site investigation, (2) soil and water investigation, (3) corrective action plan implementation, and (4) verification monitoring. (Cal. Code Regs., tit. 23, § 2722, subd. (a)).

The preliminary site assessment phase includes initial site investigation, initial abatement actions, initial site characterization and any interim remedial action. (Cal. Code Regs., tit. 23, § 2723, subd. (a)). Corrective action is complete at the conclusion of the preliminary site assessment phase, unless conditions warrant a soil and water investigation. A soil and water investigation is required if any of the following conditions exists: (1) There is evidence that surface water or groundwater has been or may be affected by the unauthorized release; (2) Free product is found at the site where the unauthorized release occurred or in the surrounding area; (3) There is evidence that contaminated soils are or may be in contact with surface water or groundwater; or (4) The regulatory agency requests an investigation, based on the actual or potential effects of contaminated soil or groundwater on nearby surface water or groundwater resources or based on the increased risk of fire or explosion. (Cal. Code Regs., tit. 23, § 2724).

The purpose of a soil and water investigation is "to assess the nature and vertical and lateral extent of the unauthorized release and to determine a cost-effective method of cleanup." (Cal. Code of Regs., tit. 23, § 2725, subd. (a)).

SWRCB Resolution 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304* also applies to petroleum UST cases. Resolution No. 92-49 directs the RWQCBs to ensure that water affected by an unauthorized release attains either background water quality or the best water quality which is reasonable if background water quality cannot be restored (SWRCB Resolution No. 92-49, 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 probable future beneficial use 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 (hereafter basin plan). (*Ibid.*)

Resolution No. 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 period (SWRCB Resolution No. 92-49, III.A).

The Central Coast RWQCB Basin Plan (Basin Plan) designates existing and potential beneficial uses of groundwater in the Gilroy-Hollister Valley groundwater basin as municipal and domestic (MUN) supply, industrial supply, and agricultural supply (CCRWQCB & SWRCB, Water Quality Control Plan, Central Coast Basin (1994) at p.II-1). The Basin Plan specifies a narrative taste and odor water quality objective as follows: "Groundwaters shall not contain taste or odor producing substances in concentrations that adversely affect beneficial uses." (Id. at p. III-14). The Basin Plan also contains the following narrative water quality objective for organic chemicals as follows: "...groundwaters (designated for beneficial use as domestic or municipal supply) shall not contain concentrations of organic chemicals in excess of the limiting concentrations set forth in California Code of Regulations, Title 22,..." (Id. at III-14).

With regard to the water quality objectives for organic chemicals, the State Department of Health Services (DHS) has set maximum contaminant levels (MCLs) for benzene, toluene, ethylbenzene, and xylene (BTEX) in drinking water of 1 ppb, 100 ppb, 680 ppb, and 1,750 ppb, respectively (Cal. Code of Regs., tit. 22, § 64444). Although DHS has not yet set an MCL for methyl tertiary butyl ether (MTBE), DHS has set an interim action level of 35 ppb (DHS Memorandum from Joseph P. Brown, Ph.D., Acting Chief, Water Toxicology Unit to Alexis M. Milea, P.E., Acting Supervisor, Standards and Technology Unit, Office of Drinking Water (February 19, 1991) at p. 2). DHS has more recently proposed a 5 ppb MTBE concentration as a secondary drinking water standard for taste and odor. The threshold odor concentration of commercial gasoline (measured as total petroleum hydrocarbon gasoline, or TPH-g) in water is commonly accepted to be 5 ppb, with 10 ppb giving a strong odor. The threshold odor concentration of commercial diesel (measured as TPH-d) in water is commonly accepted to be 100 ppb (SWRCB, Water Quality Criteria (2d ed. 1963) p. 230).

The following is a brief historical summary of petitioner's site at 7290 Monterey Street in the City of Gilroy. The site is located in a commercial area of the city and was an operating service station from about 1930 to 1970; gasoline was dispensed from three USTs with capacities of 3,000 gallons, 4,000 gallons, and 5,000 gallons. There are no water supply wells within 750 feet of the site and the nearest surface water is about 2,000 feet away. Since demolition of the station and removal of the USTs in 1974, the site has remained vacant.

Soil underlying the site consists of beds and lenses of clayey, silty, sandy, and gravelly alluvial sediments. Groundwater at the site is unconfined and flows in a general southeasterly direction with a gradient of about 0.02. The depth to the water table varies seasonally from about 20 to 30 feet in the Spring to about 40 to 50 feet in the Fall.

In May 1990, in conjunction with a property acquisition by the Santa Clara County Transportation Agency, ten soil borings were drilled at the site to depths of about 16 to 56 feet. Analyses of the soil samples from the borings revealed concentrations of TPH-g as high as 4,900 ppm in the vicinity of the former pump islands. In December 1990, three groundwater monitor wells were installed at the site; one at the location of the former pump islands, one near the location of the former UST complex, and one about 30 feet easterly of the pump islands. Analyses of soil samples collected from these borings revealed concentrations of TPH-g as high as 11,000 ppm at a depth of 46 feet near the pump islands and relatively minor concentrations (<10 ppm) at a comparable depth near the former UST complex. Analyses of groundwater samples detected concentrations of TPH-g and benzene of 2,600 ppb and 120 ppb, respectively, from the well near the pump islands, 420 ppb and 0.7 ppb from the well near the UST complex, and "non-detect" from the third well.

Between May and December 1991, six additional groundwater monitor wells were installed at the site. Soil data from these wells indicated that the release occurred in the vicinity of the pump islands, that soil to a depth of about 50 feet was impacted, and that a clayey and silty stratum present at that depth precluded the deeper migration of significant concentrations of petroleum hydrocarbons. Also, in June, July, and October 1991, 0.03 to 0.07 foot of free product was observed in the well located near the former pump islands.

In August 1992, two vapor extraction wells and two air sparge wells were installed; one pair in the vicinity of the former pump islands and the other near the former UST complex. Analyses of soil samples collected at five foot intervals from the borings near the

former pump islands revealed TPH-g concentrations ranging from about 100 ppm at a depth of 10 feet to 3,500 ppm at 45 feet; 1.2 ppm TPH-g was detected in a sample from the depth of 50 feet. All of the soil samples from the pair of wells installed near the former UST complex tested "non-detect" except for 1,100 ppm TPH-g in the sample from a depth of 35 feet and trace concentrations of ethylbenzene and xylene in the sample from a depth of 40 feet.

In January 1993, petitioner submitted a remedial action plan (RAP) to the District which proposed soil vapor extraction (SVE) from the permeable zone above the clayey stratum at about 50 feet and air sparging in the saturated zone below that stratum.

In June 1993, approximately 330 cubic yards of affected soil were excavated from the areas of the former UST complex, product lines, dispensers, an oil/water separator, and a waste oil UST. Confirmation soil samples collected at depths of 10 and 14 feet from the bottom of the UST excavation tested "non-detect" for all petroleum hydrocarbon constituents. Samples collected at a depth of two feet from the bottom of the former pump island and product piping excavation detected diesel range hydrocarbons² (reported as TPH-d) at concentrations ranging from about 10 to 260 ppm and trace amounts (0.005 to 0.006 ppm) of toluene. Samples collected at depths of three and five feet from the respective bottoms of the oil/water separator and waste oil UST excavations detected diesel range hydrocarbons at concentrations 140 and 50 ppm and trace amounts of toluene (0.007 ppm) and motor oil range hydrocarbons (54 ppm).

In May 1994, a second vapor extraction well was installed in the vicinity of the former pump islands and the SVE and air sparging remediation system became operational. By the time the system was shut down in January 1996, almost 4,000 pounds (about 640 gallons) of TPH-g and approximately 70 pounds (about 10 gallons) of benzene were removed from the subsurface.

In May 1996, soil samples were obtained from three soil borings to assess the efficacy of the corrective action activities. Two borings were located in the vicinity of the former pump islands while the third was near the former UST complex.

In October 1996, groundwater samples were obtained from three GeoProbe[®] borings drilled to depths of 40 feet along the down-gradient edge of the site to assess plume migration and from a vapor extraction well located near the former pump islands. The

² The laboratory reports for these samples indicate that the hydrocarbons detected were not diesel fuel. The analyses suggest the presence of highly weathered gasoline which, through the processes of volatilization and microbial degradation, has lost most of its lower molecular weight compounds.

GeoProbe[®] samples did not detect any petroleum hydrocarbons, including MTBE. The groundwater sample from the vapor extraction well contained 680 ppb TPH-g and 3.8 ppb benzene.

By letter dated January 17, 1997, petitioner requested that the District close its case on the basis that site conditions do not pose a threat to human health and safety, or the environment. Responding in a letter dated February 13, 1997, District staff informed petitioner that after consultation with RWQCB staff, the site could not be closed due to presence of dissolved phase petroleum hydrocarbons (BTEX and TPH-g) in groundwater at concentrations greater than water quality objectives. District staff also noted that the top of the screen intervals in two wells, one near the source area and one down-gradient, were up to 20 feet below the water table and therefore the wells did not provide groundwater samples representative of shallower, affected groundwater. Further, District staff concluded that the extent of affected groundwater had been defined and requested that petitioner submit a Corrective Action Plan (CAP).

In April 1997, responding to District staff's concern regarding shallow site groundwater, petitioner installed a shallow down-gradient well and collected groundwater samples from it, from two vapor extraction wells located near the former pump islands, and from other site wells. The samples indicated 58,000 ppb TPH-g in shallow groundwater (at a depth of about 24 feet) near the source area, unaffected groundwater (shallow and deep) about 50 feet down-gradient, and that concentrations of TPH-g at the source area decreased exponentially with depth to 380 ppb at about 40 feet and "non-detect" at about 70 feet.

By letter dated June 13, 1997, petitioner requested that the UST Cleanup Fund review its case and grant closure status.

II. CONTENTIONS AND FINDINGS

Contention: The petitioner contends its case should be closed because soil and groundwater assessment and corrective actions conducted at the site since 1990 have diminished the presence of residual petroleum hydrocarbon constituents to a point where they pose a "low risk" to public health and safety, the environment, and to current or probable future beneficial uses of water.

Findings: Petitioner's contention has merit. As explained below, the facts in the record support the finding that additional soil and groundwater investigation or remediation is not necessary and that residual petroleum hydrocarbon constituents at petitioner's site do not pose a threat to human health and safety, or the environment, and do not adversely affect, or threaten to affect, current or probable future beneficial uses of water. In addition, the level of site cleanup is consistent with the maximum benefit to the people of the state and will meet the applicable objectives in the Central Coast RWQCB Basin Plan within a reasonable time frame.

The primary source (product piping between the USTs and dispenser islands which had not been active for at least 14 years prior to initiation of corrective actions) as well as substantially affected soils from the immediate vicinity of the source have been removed. Free product has not been observed in any site monitor wells since the Fall of 1991 when less than one inch of product was detected in one well. Further, the May 1996 confirmation sampling conducted after 19 months of SVE remediation suggests that 60 to 80 percent of the residual mass of petroleum hydrocarbons were removed from the subsurface. For example, maximum pre-corrective action TPH-g concentrations in soil at 40 to 50 feet in the vicinity of the pump islands ranged from 920 to 11,000 ppm compared to post-remediation concentrations in the same impacted interval from only 92 to 300 ppm.

With regard to affected groundwater and its potential to adversely impact current or probable future beneficial uses, substantial evidence in the record indicates that concentrations of dissolved phase hydrocarbons are decreasing, the plume is stable, and MTBE is not present in site groundwater. Pre-remediation concentrations of TPH-g and benzene detected in groundwater (from monitor well U-8) in the vicinity of the former pump islands typically ranged from 30,000 to 120,000 ppb and 300 to 3,100 ppb, respectively. Furthermore, a thin but measurable thickness to free product was present in well U-2 during the Summer and Fall of 1991. Concentrations of TPH-g and benzene detected in groundwater samples from monitor well

U-1, located about 50 feet down-gradient of the former pump islands ranged from "non-detect" to 330 ppb and "non-detect" to 9.9 ppb, respectively. Post-remediation concentrations of TPH-g and benzene in groundwater samples from well U-8 have ranged from "non-detect" to 110 ppb and "non-detect" to 2.6 ppb, respectively, and in samples from well U-2 from "non-detect" to 55 ppb and "non-detect" to 0.98 ppb. Groundwater samples from the down gradient well, U-1, have indicated "non-detect" for TPH-g and a maximum concentration of benzene of 1.7 ppb. However, since July 1995, "non-detect" values have been reported (seven groundwater monitoring events) for all petroleum constituents in well U-1.

While a comparison of the pre- and post-remediation data indicate a substantial decline in the concentration of dissolved phase petroleum hydrocarbons in the vicinity of former pump islands and limited vertical and horizontal plume migration, District staff have questioned the representativeness of sample data. The depth to groundwater when the initial 10 monitor wells (U-1 through U-10) were installed in 1991-92, ranged from 50 to 60 feet. As such, when the water table began to rise in 1993 in response to increased rainfall, the screened interval of many of these wells no longer intersected the water table. In the case of wells U-1 and U-2, the elevation of the water table during the post-remediation monitoring period has ranged as high as 34 to 41 feet above the top of the respective well screens. In May 1997, in response to the District's concern, petitioner installed well U-11 (screened from 18 to 43 feet below grade) adjacent to down gradient well U-1, sampled groundwater in the vapor extraction wells located adjacent to well U-2 (UV-2, screened from 35 to 50 feet and UV-3, screened from 14 to 29 feet), and also sampled groundwater in well U-1.

The relatively high concentrations of dissolved phase hydrocarbons detected in the May 1997 groundwater sample from well UV-3 (TPH-g = 58,000 ppb and benzene = 1,300 ppb) are reflective of the presence of residual petroleum hydrocarbons which remain in soil in the depth interval monitored. However, the May 1997 data also show that concentrations decrease by two to four orders of magnitude from that depth to the depth monitored by well UV-2 (a vertical distance of 6 to 21 feet) and are not detected at the depth monitored by well U-2 (10 to 25 feet deeper than UV-2). The data also show that constituents are not detected in the pair of monitor wells (U-1 and U-11) located about 50 feet down-gradient and monitoring virtually the same depth interval as the three source area wells. Thus, the plume of dissolved phase petroleum

hydrocarbons is shown to attenuate in both the lateral and vertical directions, to be limited to a localized area of shallow groundwater, and to be stable.

Based on the May 1997 sampling event, only groundwater in the immediate area of the former pump islands fails to meet the RWQCB's Basin Plan objectives. Samples from wells UV-2 and UV-3 exceed the taste and odor threshold concentration for TPH-g and the MCL for benzene; concentrations of toluene, ethylbenzene and xylene in groundwater from well UV-3 also exceed MCLs. However, it is evident that these constituents attenuate rapidly and that groundwater meets all Basin Plan objectives within 50 feet, vertically and horizontally, of the source area. Further, because the residual petroleum hydrocarbons which contribute to the concentrations detected in the sample from well UV-3 are present in the zone of seasonal water table fluctuations, the periodic draining and resaturation of this zone provides favorable conditions for very active microbial degradation and volatilization of any remaining constituents. Thus, the available facts indicate (1) the presence of a localized plume in shallow groundwater which is stable, (2) conditions which will further diminish residual petroleum concentrations within that limited area in the future, and (3) there is little likelihood that shallow groundwater will be put to beneficial uses in the foreseeable future. Hence, the significant period of time that it may take for water quality in this limited area to meet all Basin Plan objectives is a reasonable time frame.

The facts in this particular case indicate that with no further regulatory action, residual detectable concentrations of TPH-g, benzene, toluene, ethyl benzene and xylene present in shallow groundwater and adsorbed to shallow soils will remain localized and continue to attenuate naturally over time and that the lingering, but diminishing residual concentrations of petroleum constituents will not affect beneficial uses of groundwater. Nevertheless, concentrations of TPH-g in that shallow groundwater in immediate contact with (albeit limited) residual TPH-g adsorbed to soils will likely remain above 5 ppb (the commonly accepted odor threshold for water) in a localized volume of surrounding groundwater for a significant period of time. Considering the absence of existing wells in close proximity to petitioner's site, the local hydrogeologic considerations, and standard well construction practices, such a limited, isolated scenario will not unreasonably affect existing or probable future beneficial uses.

To remove all traces of residual petroleum constituents (e.g. TPH-g at less than 5 ppb) at petitioner's site would require additional, but feasible, excavation of soil in the area of the

former pump island to a depth of about 40 feet. Removal of 1,000 to 1,500 cubic yards of affected soil would potentially eliminate a majority of residual, detectable petroleum concentrations. However, if complete removal of detectable traces of petroleum constituents becomes the standard for UST corrective actions, the statewide technical and economic implications will be enormous. For example, disposal of soils from comparable areas of excavation throughout the state would greatly impact already limited landfill space. In light of the precedent that would be set by requiring additional excavation at this site and the fact that beneficial uses are not threatened, attaining background water quality at petitioner's site is not feasible. It is impossible to determine the precise level of water quality that will be attained given the limited residual TPH-g that remains at the site, but in light of all the factors discussed above, a level of water quality will be attained that is consistent with the maximum benefit to the people of the state.³

The final step in determining whether cleanup to a level of water quality less stringent than background is appropriate for this site requires a determination that the alternative level of water quality will not result in water quality less than that prescribed in the relevant basin plan. Pursuant to SWRCB Resolution 92-49, a site may be closed if the basin plan requirements will be met within a reasonable time frame.

In this particular case, as discussed above, TPH-g and BTEX in the shallow groundwater in immediate (though seasonal) contact with the limited residual petroleum hydrocarbon constituents adsorbed to soils will likely remain above, and thus violate, the Basin Plan's objectives in a localized volume of surrounding groundwater for a significant period of time. This time period could be anywhere from a few decades for BTEX to degrade below

³ In approving an alternative level of water quality less stringent than background, the SWRCB has also considered the factors contained in California Code of Regulations, title 23, section 2550.4, subdivision (d). As discussed earlier, the adverse effect on shallow groundwater will be minimal and localized, and there will be no adverse effect on the groundwater contained in deeper aquifers, given the physical and chemical characteristics of petroleum constituents; the hydrogeological characteristics of the site and surrounding land; and the quantity of the groundwater and direction of the groundwater flow. In addition, the potential for adverse effects on beneficial uses of groundwater is low, in light of the proximity of groundwater supply wells; the current and potential future uses of groundwater in the area; the existing quality of groundwater; the potential for health risks caused by human exposure; the potential damage to wildlife, crops, vegetation, and physical structures; and the persistence and permanence of potential effects.

Finally, a level of water quality less stringent than background is unlikely to have any impact on surface water quality, in light of the volume and physical and chemical characteristics of petroleum constituents; the hydrogeological characteristics of the site and surrounding land; the quantity and quality of groundwater and the direction of groundwater flow; the patterns of precipitation in the region, and the proximity of residual petroleum to surface waters.

MCLs to hundreds of years for that limited volume of groundwater in immediate contact with longer chain, immobile residual petroleum constituents adsorbed to soils to meet the commonly accepted 5 ppb taste and odor threshold.

Nonetheless, during this time these residual concentrations in excess of Basin Plan objectives will not pose a threat to current or future beneficial uses. It is highly unlikely that petroleum hydrocarbon constituents detected in localized areas in the immediate area of the pre-1974 release will migrate substantially beyond current limited spatial extent. Though the longer chain hydrocarbons comprising weathered TPH-g biodegrade more slowly than certain petroleum constituents, such as benzene, they are also more recalcitrant (i.e., less volatile, less soluble and highly absorbent) and much less mobile. It is also highly unlikely that this particular very limited, and for the most part "seasonal", pocket of shallow groundwater will be used directly as a source of drinking water. Thus, the significant period of time that it will take for water quality in this limited area to meet all Basin Plan objectives is a reasonable time frame. Closure of the site, given the facts in this particular case, is appropriate.

III. SUMMARY AND CONCLUSION

1. There is no evidence of MTBE at this site. Corrective actions including three and one-half years of vapor extraction and removal of 330 cubic yards of contaminated soil have removed an estimated 60 to 80 percent of the mass of residual petroleum hydrocarbons at petitioner's site.

2. Twenty-three years after the release was stopped, groundwater meets Basin Plan objectives within 50 feet vertically and horizontally of the source of contamination.

3. Petitioner's site is located in a commercial area. No water supply wells are located within 750 feet and the nearest surface water is at a distance of about 2,000 feet from the site.

4. Additional soil and water remediation at petitioner's site is not necessary.

5. The level of site cleanup is consistent with the maximum benefit to the people of the state.

6. Given the adverse technical and economic implications statewide if further corrective action was required, and the minimal benefits, if any, that would be gained by further corrective action, it is not feasible to attain background water quality at petitioner's site.

7. Detectable concentrations of BTEX in shallow groundwater in "seasonal" contact with the limited weathered residual petroleum hydrocarbons adsorbed to soil particles may remain above MCLs and thus violate the Basin Plan objectives in a very localized, small volume of surrounding groundwater for decades.

8. Detectable concentrations of TPH-g in shallow groundwater in "seasonal" contact with the limited weathered residual petroleum hydrocarbons adsorbed to soil particles will likely remain above 5 ppb (the commonly accepted odor threshold for drinking water) and thus violate the Basin Plan's narrative odor objective in a very localized, small volume of surrounding groundwater for anywhere from decades to hundreds of years.

9. The determination as to what constitutes a reasonable period to attain water quality objectives must be based on evaluation of all relevant factors, including but not limited to the extent and gravity of any threat to public health and the environment during the period required to meet Basin Plan objectives. Although the time required to attain objectives in this case is lengthy, it is a reasonable period considering the facts of this particular case, including that there are no known drinking water wells within 750 feet of the site, it is highly unlikely that petroleum constituents detected in localized areas in the immediate area of the discharge will migrate substantially beyond the current limited spatial extent, and it is highly unlikely that this particular very limited pocket of shallow groundwater will be used directly as a source of drinking water in the foreseeable future.

10. Therefore, no further corrective action is necessary.

11. The above conclusions are based on the site-specific information relative to this particular case.

IV. ORDER

IT IS THEREFORE ORDERED that petitioner's case be closed, and no further action related to the release be required. The UST Cleanup Fund Manager is directed to issue petitioner a uniform closure letter pursuant to Health and Safety Code section 25299.37, subdivision (h).

CERTIFICATION

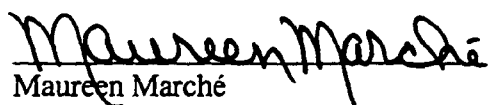
The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 19, 1998.

AYE: John Caffrey
James M. Stubchaer
John W. Brown

NO: Marc Del Piero
Mary Jane Forster

ABSENT: None

ABSTAIN: None


Maureen Marché
Administrative Assistant to the Board

