ALAMEDA COUNTY WATER DISTRICT

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Jennifer Scholte (sent via email to jscholte@waterboards.ca.gov)
Division of Water Quality
State Water Resources Control Board
P.O. Box 2231
Sacramento, CA 95812

Dear Ms. Scholte:

Subject: Low-Threat Underground Storage Tank Closure Policy Scoping Document

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Scoping Document for the Water Quality Control Policy for Low-Threat Underground Storage Tank Closure (Scoping Document).

ACWD supplies water to a population of over 337,000 in the cities of Fremont, Newark, and Union City. ACWD was formed in 1914 by an act of the California Legislature for the purpose of protecting the water in the Niles Cone Groundwater Basin and conserving the water of the Alameda Creek Watershed. Local runoff along with imported water is percolated into the Niles Cone Groundwater Basin through recharge in Alameda Creek itself and through recharge ponds within the Quarry Lakes Regional Recreational Area and adjacent areas. The water is subsequently recovered through groundwater production wells and provided as potable supply to ACWD's customers. In normal years, groundwater accounts for approximately 40 percent of ACWD's water supply, and in dry years groundwater has accounted for over 60 percent of ACWD's water supply. As such, a key objective for ACWD is to ensure the protection of the groundwater basin that constitutes this important source of water supply.

ACWD is in a unique position because ACWD is a water agency that is responsible for groundwater management and is also responsible for providing the technical oversight of Leaking Underground Storage Tank (LUST) cases as well as Site Cleanup Program (SCP) cases. In 1988, ACWD began to informally provide assistance to the Regional Water Quality Control Board – San Francisco Bay Region (Regional Board) in overseeing the investigation and remediation of LUST and SCP cases in the cities of Fremont, Newark, and Union City. This relationship was formalized in a Cooperative Agreement between ACWD and the Regional Board that was executed on June 27, 1996. ACWD is responsible for a total of 365 LUST cases and has closed 224 (61%) of these cases.

ACWD has reviewed the Scoping Document and would appreciate your consideration of the following comments:

Baseline Analysis

The Scoping Document (pp. 19 and 20) provides that existing petroleum in the subsurface and petroleum impacted groundwater that exists at the LUST site are the "baseline" conditions. We believe the use of the existing contaminated condition as the baseline for the Scoping Document is not appropriate under the circumstances. Although the "baseline" is "normally" "the physical environmental condition in the vicinity of the project, as they exist at the time of the notice of preparation is published . . ." (14 CCR §15125(a)), the lead agency has discretion to use a different baseline. Even though the CEQA Guidelines provide that physical conditions at the time 'normally' constitute the baseline for determining impacts, a lead agency may determine that another baseline is more appropriate, either for overall evaluation of a project's impacts or for evaluation of a particular project impact.

The proposed Low-Threat UST Closure Policy (Policy) is not an isolated project, such as a residential development, which would have potential environmental impacts in the vicinity of the project. Rather, the proposed Policy provides for a global change to the LUST clean-up procedures. Its impacts will be different in each area it is implemented. A better baseline to determine the overall evaluation of a project's impacts would be to use the current closure policy as the baseline. This would be more in line with the overriding purpose of the California Environmental Quality Act (CEQA) to ensure that agencies regulating activities that may affect the quality of the environment give primary consideration to preventing environmental damage.

The baseline (pp. 27-28) with existing petroleum hydrocarbon impacted sites permeates the analysis of the quality of the environment in the Scoping Document and the findings of no impacts under the mandatory findings of significance. By treating the existing conditions as the "baseline," the Scoping Document artificially limits the impacts the changes from the existing policy and procedures for LUST will have on the environment. A baseline that knowingly allows petroleum to be left in place for a longer period of time, and above the Water Quality Objectives (WQOs), does not have a primary consideration to prevent environmental damage. Here, the State Water Resources Control Board (SWRCB) should analyze potential impacts from the proposed Policy against the current policy as the baseline.

Further, petroleum impacted groundwater that exists at the site is considered the baseline. According to the Scoping Document (p. 20), [n]atural attenuation processes degrade this petroleum and will restore [WQO] over time." This however fails to address the potential impacts from leaving the petroleum in place during the attenuation process, or the cumulative effects from a number of closure sites allowed to attenuate over time. Finally, there is no description of what a "reasonable period of time" is for the attenuation process to occur.

Potential Impacts to Groundwater

Groundwater is a major source of drinking water for the customers of ACWD, and as such, it is a rare and unique resource which requires special emphasis. 14 CCR §15125(c). Further, consideration and discussion of significant potential environmental impacts should include direct and indirect significant effects involving physical changes and health and safety problems related to water resources. 14 CCR §15126.2(a)

The Scoping Document contains several provisions that potentially impact ACWD water resources:

- p. 3 - the Scoping Document states that the proposed policy "will cause changes in the timing of activities that normally occur in the corrective action process."

- p. 3 - the Scoping Document states that the proposed policy could "cause regulatory agencies to close cases with more petroleum left in place than with current practices. This would cause petroleum to remain in the subsurface subject to natural attenuation process for a longer period of time."

- p. 20 - the Scoping Document states that the proposed Policy would allow petroleum to be left in place above WQOs.

The Scoping Document fails to address the potential impacts that the change in timing of corrective actions may have on groundwater resources. Likewise, the Scoping Document fails to address the potential impacts resulting from allowing petroleum to be left in place for a longer period of time, and above the WQOs. Responding to whether the project would substantially deplete groundwater supplies, the Scoping Document (p. 21) states that "UST closure does not use groundwater supplies." This however, fails to address the impact of decreased groundwater supplies as a result of potential aquifer contamination.

Specific Comments

1. **Section 6, Geology and Soils**

   Item (a) states that there will be no impact that would expose people or structures to potential adverse effects. The rationale presented to support the no impact asserts that "any excavation and fill activities would have already occurred and destruction of the monitoring wells will have no negative impacts." This statement implies that all contaminated soil has been adequately remediated at a site, and that no further excavations are needed, whereas just the opposite is likely to occur since the proposed Policy would allow a site to be closed with elevated concentrations of petroleum hydrocarbons remaining in soil. For instance, residual concentrations of benzene in soil up to 100 parts per million (ppm) would be permissible under the proposed Policy, which greatly exceeds the Regional Water Quality Control Board's Environmental Screening Level (ESL) for benzene of 0.044 ppm (residential and

commercial use), as well as the Environmental Protection Agency's Regional Screening Level (RSL) for benzene of 1.1 ppm (residential use) and 5.4 ppm (industrial use).

The Scoping Document also fails to address the fact that closing LUST cases may result in redevelopment of the site at some point in the future, which could result in exposure to contaminated soil during various excavation activities conducted at the site. Leaving soil contamination behind in the subsurface impacts the physical use of all impacted properties and public right of ways. For example, if impacted soil is encountered during underground utility installations, road improvements, subsurface building constructions (basements, parking lots, vaults, etc.), the potential economic impact to these projects due to schedule delays, waste disposal/treatment cost, and worker exposure issues could be significant. The Policy needs to take into consideration the financial impacts on off-site property owners and utility companies for leaving contamination behind and not managed. Therefore ACWD requests that the Scoping Document designation for Geology and Soils be changed to reflect a Potentially Significant Impact.

2. **Section 8, Hazards and Hazardous Materials**

Item (d) states that there would be a less than significant impact from the Policy (closing LUST sites with elevated levels of soil and groundwater contamination) that would create a significant hazard to the public or the environment. The rationale presented to support the less than significant finding asserts that petroleum hydrocarbon impacted groundwater that exists at LUST sites is a baseline condition. ACWD disagrees with this rationale which implies that elevated concentrations of petroleum hydrocarbons in soil and groundwater are no longer considered as hazardous. As stated above, the SWRCB should analyze potential impacts from the proposed Policy against the current policy baseline. Closing cases with elevated concentrations of petroleum hydrocarbons in soil and groundwater will have a significant impact on the public and the environment, and therefore ACWD requests that the Scoping Document designation for Hazards and Hazardous Materials be changed to reflect a Potentially Significant Impact.

3. **Section 9, Hydrology and Water Quality**

Items (a) and (f) state that there will be no impact regarding violations of any water quality standards, or otherwise substantially degrade water quality. The rationale presented to support these no impact findings assert that petroleum hydrocarbon impacted groundwater that exists at LUST sites is a baseline condition. ACWD strongly disagrees with this rationale which implies that background water quality, beneficial uses of groundwater, and water quality objectives are no longer being considered for cases where groundwater has been impacted by petroleum hydrocarbons. As stated above, the SWRCB should analyze potential impacts from the proposed Policy against the current policy baseline. It is simply not acceptable to ACWD to assert that groundwater that has been severely degraded by benzene is now considered a baseline condition. The draft Policy would allow the closure of cases with benzene at concentrations up to 3,000 ppb in groundwater; this is not an

acceptable baseline condition, especially considering that the drinking water standard for benzene is 1 ppb. Closing cases with elevated concentrations of petroleum hydrocarbons in groundwater will have an impact on water quality and groundwater resources, and therefore ACWD requests that the Scoping Document designation be changed to reflect a Potentially Significant Impact to water quality.

Item (b) states that there would be no impact from the Policy that would substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume. The rationale presented to support the no impact finding asserts that "UST closure does not use groundwater supplies." This rationale takes an extremely narrow view that the act of closing a LUST site would not use groundwater supplies, but completely ignores the fact that leaving residual petroleum hydrocarbons in groundwater will result in a loss of storage capacity for the groundwater basin, and will interfere with water utilities and groundwater management agencies ability to develop new groundwater sources (e.g., new water supply production wells). In other words, residual contaminated groundwater will no longer be available for use by water utilities until WQOs have been achieved, which may take tens to hundreds of years before natural attenuation will reduce the contaminants to acceptable levels. This section also fails to address the potential regional impact that could result from the closure of a significant number of cases under the proposed Policy. It is critical that the Scoping Document evaluates the cumulative effects of reduced storage capacity (i.e., depletion of groundwater supplies) on groundwater basins throughout the State.

The Scoping Document also fails to address the impacts to on-site and off-site property owners ability to exercise their water rights to available groundwater (e.g., installing a well for irrigation) if their property is located above, or in close proximity (1,000 feet) to residual petroleum hydrocarbons in groundwater above WQOs.

4. **Section 10, Land Use and Planning**

Item (b) states that there will be no impact from the proposed Policy that will conflict with any applicable land use plan adopted for the purpose of avoiding or mitigating an environmental effect. Similar to most sections of the Scoping Document, the rationale presented to assert that there will be no impact to land use planning takes a narrow view of the potential impacts resulting from implementing the proposed Policy. Although implementation of the Policy may not specifically conflict with an agency's plan adopted for the purpose of avoiding or mitigating an environmental affect, it could conflict with local land use and/or zoning decisions, and therefore should be considered as causing an environmental impact. For instance, workers may come into contact with contaminated soil and groundwater during construction at down-gradient properties (possibly residential, industrial, or commercial) located within the groundwater plume, thereby necessitating development and implementation of procedures for the management and/or disposal of the contaminated groundwater. Determination of the financially responsible party for these actions will likely be protracted and costly in and of itself. If owners of properties within the

groundwater plume cannot conduct activities on their property without the possibility of contacting the plume, then their land use is restricted. In addition, property values both on-site and off-site may decline due to the presence of soil and groundwater contamination beneath a property.

An additional impact that is not addressed in the Scoping Document is an analysis of future land use decisions and actions resulting from the increase in residual contaminants left at sites closed under the proposed Policy. The Policy itself lacks any requirement for various permitting agencies regarding notification to the appropriate agencies of proposed changes in future land uses at sites with residual contamination. There is a chance that leaving more residual contaminants could increase the amount of exposure, potentially with higher concentrations, with the residual contamination prior to it fully degrading. This occurs when land use changes and the appropriate precautions are not taken, due to lack of notification or ineffectual notification processes, to protect the workers from the residual contamination. Even when the residual contamination is known and identified, the financial impacts of dealing with the residual contamination may significantly alter the proposed projects, if not completely deter them from occurring.

5. **Section 17, Utilities and Service Systems**

Item (b) states that there will be no impact from the Policy that will require or result in the construction of new water facilities. The rationale presented to support the no impact finding does not address the potential for existing water supply wells to become contaminated in the future as a direct result of petroleum hydrocarbons remaining in groundwater at closed LUST cases reaching a water supply well. Closing LUST cases will result in the destruction of all monitoring wells at the site, which will preclude further monitoring of the potential migration of the contaminant plume towards water supply wells. By early removal of monitoring wells from LUST sites with elevated concentrations of petroleum hydrocarbons remaining in groundwater, the proposed Policy shifts the burden of monitoring the potential migration of contamination to water utilities and groundwater management agencies such as ACWD. Therefore ACWD requests that the Scoping Document designation be changed to reflect a Potentially Significant Impact to utility and service systems.

6. **Section 18, Mandatory Findings of Significance**

The Scoping Document, specifically the checklist of environmental impacts, focuses on construction related environmental impacts from the implementation of the proposed Policy. In several locations it describes the environmental benefits from removal of waste piles, drums, debris and other investigation and remediation material. It proposes benefits from reduced remediation by improved aesthetics, reduced impacts to air quality and greenhouse gas emissions, and the removal of monitoring wells as a possible contamination conduit.[1]

[1] However, as discussed below, it treats the existing condition as the "baseline" when addressing potentially negative impacts.

The checklist of environmental impacts needs to also address the potential cumulative water quality and natural resource impacts resulting from the implementation of the Policy.

Items (b) and (c) state that there will be no impacts that are individually limited, but cumulatively considerable, and that there will be no environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. Similar to comment #3 above, closing cases with elevated concentrations of petroleum hydrocarbons in groundwater will have a potentially significant impact on water quality and groundwater resources, especially when one considers the cumulative impacts of closing numerous sites, and the impacts to groundwater management agencies, water utilities, off-site property owners, and potential future development at or nearby contaminated groundwater sites.

The Policy needs to recognize that there are numerous open LUST sites within the various groundwater basins throughout the State, and that one has to consider the cumulative impacts from all the combined sites and not look at each site as if it were an isolated case. Within the boundaries of the ACWD alone, there are approximately 141 open LUST sites with groundwater impacts. ACWD anticipates approximately 67% of these cases (95) would likely qualify for closure under the draft. Closing the majority of these sites without any further cleanup or groundwater monitoring unjustly shifts the burden of groundwater protection (monitoring and tracking the location of plumes) to local water districts and utilities such as ACWD.

If cases are allowed to close with plumes up to 1,000 feet long, there will also be impacts on off-site property owners. Leaving contamination behind in the subsurface impacts the physical use of all impacted properties and public right of ways. For example, if impacted soil and or groundwater are encountered during underground utility installations, road improvements, subsurface building constructions (basements, parking lots, vaults, etc.), the potential economic impact to these projects due to schedule delays, waste disposal/treatment cost, and worker exposure issues could be significant. The Policy needs to take into consideration the financial impacts on off-site property owners and utility companies for leaving contamination behind and not managed.

In addition, allowing sites to close with groundwater contamination plumes up to 1,000 feet from the source of the release does not take into consideration that outside factors such as shallow construction dewatering or future development projects may be affected by the plume. In the case of dewatering, the pumping could cause the plume to migrate and impact sensitive receptors or contaminants from the plume could be extracted by the dewatering wells and discharged to surface water bodies. Also, most county and city well ordinances do not regulate dewatering activities, so no governmental agency would be in a position to notify the dewatering contractor of these residual plumes. Future development on the property with the source area or adjacent impacted properties could also have an unintended impact on residual plumes through the construction of piles, piers, elevator shafts, etc. that would act as vertical conduits and allow the contamination to impact deeper drinking water aquifers.

The proposed Policy (p. 5) acknowledges that the SWRCB Resolution 92-49 provides a policy for UST cases to attain either background water quality or the best water quality reasonably achievable. However, it states that these water quality objectives are not required to be met at the time of closure. It goes on to provide plume boundaries from the release where attenuation exceeds migration. This analysis is related to isolated LUST sites. There is no method for addressing impacts to groundwater resulting from the closure under the Policy of numerous LUST sites.

The Scoping Document designation for Mandatory Findings of Significance needs to be changed to reflect a Potentially Significant Impact.

Public Water System's Participation in the Implementation of the Policy

The Scoping Document (p. 2; *see also* Draft Policy at p. 2) provides that the "proposed policy contains an exception for cases with site specific conditions that demonstrably increase the threat associated with residual petroleum constituents.". The proposed Policy (p. 8) provides a 30 day notification requirement and opportunity for public water supply agencies to comment. Given the potential for impacts to groundwater from the cumulative effect of the proposed Policy, public water systems should have an opportunity to assess and evaluate the potential cumulative impacts of closures under the Policy to groundwater supplies to determine whether there is an increase in the threat associated with residual petroleum constituents. The 30-day notice and comment period is not enough time to make the proper evaluation. Further, the Policy should be flexible enough to allow alternative procedures for closing sites when increased threats are identified.

Summary

The Scoping Document (p. 2) and the draft Policy (p. 2) states that the "proposed Policy seeks to increase UST cleanup process efficiency." This proposed Policy does not improve the cleanup process efficiency. The documents infer that once a site is categorized as a low-threat UST closure, the contamination simply disappears as an issue and the responsible party is freed of all liability. In reality, the Policy transfers the legal and financial liability of managing contaminated properties to utilities, groundwater management agencies, local regulatory agencies, property owners, and developers. Closing cases with elevated concentrations of petroleum hydrocarbons in groundwater will have an impact on water quality and groundwater resources for decades to centuries, and will result in a loss of storage capacity for groundwater basins state-wide. Closing numerous sites with contaminants remaining in groundwater would also interfere with water utilities and groundwater management agencies ability to develop new groundwater resources (e.g., new water supply production wells), and given that all monitoring wells will have been destroyed, it will not be possible to confirm when those sources will be available again unless new monitoring wells are installed. In addition, local regulatory agencies will now have the added cost of tracking closed sites, property owners will now have to declare that contamination exists beneath their properties (both on- and off-site owners) which will affect

property values, and developers will need to account for contaminated soils and groundwater when planning construction projects. Off-site property owners, which have no affiliation with the LUST site, will now have their legal rights affected since the groundwater beneath their property is contaminated and they may not be able to exercise their water rights to available groundwater. As stated above, the proposed Policy does nothing to speed up the cleanup process; it only speeds up the closure process. In fact, it will actually slow down the cleanup process since natural attenuation is the slowest form of groundwater cleanup.

Conclusion and Request for SWRCB to Revise the Low-Threat UST Closure Policy

In the years leading up to the formation of ACWD in 1914, farmers and residents became concerned that local groundwater resources were being depleted and contaminated with seawater intrusion due, in large part, to the exporting of water to nearby communities such as Oakland and San Francisco. As a result, ACWD's long-standing and primary reason for existence is predicated on the protection of groundwater in the Niles Cone Groundwater Basin.

In the mid-1980s, a new threat to the Niles Cone Groundwater Basin was identified in the form of groundwater contamination resulting from LUST sites. Similar to ACWD's response nearly 100 years ago, ACWD took decisive action in response to the newly identified threat by taking a leadership role in the investigation and cleanup of LUST and SCP cases. ACWD has administered its Groundwater Protection Program for the past 23 years without any financial assistance from the State.

Now, in response to budget constraints at the SWRCB Cleanup Fund, the SWRCB is proposing to close thousands of LUST sites throughout the State with elevated concentrations of petroleum hydrocarbons remaining in groundwater for the expressed purpose of "preservation of limited resources for mitigation of releases posing a greater threat to human and environmental health" (SWRCB UST Program web page). Closing thousands of LUST sites throughout the State will undoubtedly preserve SWRCB Cleanup Fund resources; however, this proposed action would simply transfer the problem to utilities, groundwater management agencies, and local agencies such as ACWD without any funding to manage or respond to a threat that could remain an issue for decades, or even centuries.

ACWD's motive to request the SWRCB to revise the draft Policy is not driven by concerns that ACWD will lose funding since ACWD has never received funding from the State for that purpose. ACWD believes that the proposed policy as written is a short-sighted and inappropriate solution to the State's financial crisis, as it would allow groundwater contamination to remain unchecked and threaten public and private water supplies. Although ACWD supports the closing of low-threat UST cases in California in principle; ACWD respectfully requests the SWRCB to revise the current draft Policy in recognition that some groundwater basins require a higher degree of protection because they are actively used and are more sensitive or vulnerable to groundwater quality degradation through either individual or cumulative effects.

Thank you for the opportunity to comment on the Low-Threat Underground Storage Tank Closure Policy Scoping Document at this time. ACWD staff is available to meet with SWRCB staff to discuss our concerns, if desired. Additionally, if you have any questions regarding this letter, please contact Thomas Berkins, Groundwater Protection Program Coordinator, at (510) 668-4442, or by email at tom.berkins@acwd.com.

Sincerely,

Walter L. Wadlow
General Manager

tb/tf
cc: ACWD Board of Directors
SWRCB Board Members
Honorable Ellen Corbett, Member of the California Senate
Honorable Robert Wieckowski, Member of the California Assembly
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