ALAMEDA COUNTY WATER DISTRICT

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March 19, 2012

Jeanine Townsend *(sent via email to commentletters@waterboards.ca.gov)*
Clerk to the Board
State Water Resources Control Board
1011 I Street, 24th Floor
Sacramento, CA 95814

Dear Ms. Townsend:

Subject: Comment re: Low-Threat UST Closure Policy

The Alameda County Water District (ACWD) wishes to thank you for the opportunity to comment on the Low-Threat Underground Storage Tank Case Closure Policy (Policy) and the Draft Substitute Environmental Document (SED).

ACWD supplies water to a population of over 328,000 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 to the residents and businesses in ACWD's service area.

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 Underground Storage Tank (UST) 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 UST 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 UST cases and has closed 227 (62%) of these cases.

ACWD has reviewed the draft SED and Policy and would appreciate your consideration of the comments for the SED contained in Attachment 2 and the comments for the Policy contained in Attachment 3.

Summary of Concerns for the SED and Policy

ACWD previously provided comments to the State Water Resources Control Board (SWRCB) on the Scoping Document for the Water Quality Control Policy for Low-Threat Underground Storage Tank Closure (Scoping Document) by letter dated November 8, 2011. Although we appreciate that the Policy was slightly modified to include criteria to address "nuisance" conditions and free product, ACWD is disappointed that the revised Policy and SED remain essentially unchanged from the first draft Policy and Scoping Document, and that most of ACWD's substantive comments to these documents were apparently ignored. What is particularly disturbing to ACWD is that the SED document, like the Scoping Document, continues to assert that there will be no water quality impacts resulting from adoption of the draft Policy, based primarily on the SWRCB's contention that the existing petroleum hydrocarbon soil and groundwater contamination in the subsurface is the "baseline condition."

As set forth in Attachment 1, the SED fails to meet CEQA's broad policy goals and substantive standards. It fails to address cumulative impacts, reasonable alternatives to the project, and mitigation measures to avoid or reduce any significant or potentially significant environmental impacts as required under 23 CCR §3777 and 14 CCR §15252. Further, the SED is inconsistent with existing SWRCB policies and procedures for waste discharge and restoration of effected waters.

The SED (p. 3) and the draft Policy (p. 2) state 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 a negative 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 UST 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 Draft SED and Policy

In the years leading up to the formation of ACWD in 1914, local farmers and residents became concerned that 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 UST 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 UST 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 UST 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 UST 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 its UST program. 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. In order to address the SWRCB's desire to adopt a low-threat UST case closure policy, ACWD has proposed alternative groundwater closure criteria based on the vulnerability and existing drinking water use of groundwater basins, as outlined in our comments for the draft Policy in Attachment 3 (see Specific Comment #1, Groundwater Closure Criteria comments on pages 4 and 5 of Attachment 3).

ACWD's Board of Director's have also expressed great concern with the draft Policy for the reasons expressed above, and have recently adopted the attached Resolution No. 12-016 on March 8, 2012, which urges the SWRCB to modify the draft Policy to:

1) Provide an exemption for groundwater basins that are actively used as a drinking water supply and are vulnerable to contaminants;

2) Address the cumulative impact on water quality and groundwater resources from closing numerous cases with elevated concentrations of petroleum hydrocarbons; and

3) Ensure that the burden and expense associated with tracking groundwater plumes containing petroleum hydrocarbons remains with the party responsible for contaminating the property and is not placed on local agencies, residents, and businesses.

Thank you for the opportunity to comment on the draft SED and Policy at this time. ACWD respectfully requests the SWRCB to consider Resolution No. 12-016, as well as the comments provided for the SED (Attachment 2) and Policy (Attachment 3). 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
Attachments: Attachment 1 - ACWD Resolution No. 12-016
Attachment 2 - ACWD Comments for SED
Attachment 3 - ACWD Comments for Draft Policy

cc: ACWD Board of Directors
SWRCB Board Members
Honorable Ellen Corbett, Member of the California Senate
Honorable Robert Wieckowski, Member of the California Assembly
Danielle Blacet, Association of California Water Agencies
Leah Walker, California Department of Public Health
Kathy Snelson, Groundwater Resources Association of CA
Jay Swardenski, City of Fremont
Roxanne Muller, City of Newark
Joan Malloy, City of Union City
Hugh Murphy, City of Hayward
Donna Drogos, Alameda County Health Care Services Agency
Stephen Hill, Regional Water Quality Control Board

ATTACHMENT 1

RESOLUTION NO. 12-016

OF BOARD OF DIRECTORS OF ALAMEDA COUNTY WATER DISTRICT URGING MODIFICATIONS TO THE STATE WATER RESOURCES CONTROL BOARD'S DRAFT LOW-THREAT UNDERGROUND STORAGE TANK CASE CLOSURE POLICY

WHEREAS, the Alameda County Water District (District) was formed in 1914 for the purpose of protecting the water in the Niles Cone Groundwater Basin and conserving the water of the Alameda Creek Watershed; and

WHEREAS, the Niles Cone Groundwater Basin is very sensitive and vulnerable to contaminants due to the highly permeable shallow aquifer that is used as a source of drinking water from the groundwater basin; and

WHEREAS, the District supplies water to a population of over 328,000 in the cities of Fremont, Newark, and Union City and local groundwater accounts for approximately 40 to 60 percent of the District's supply; and

WHEREAS, the District is a water agency that is responsible for groundwater management and is also the lead agency responsible for providing the technical oversight of leaking Underground Storage Tank (UST) cases within the District; and

WHEREAS, the State Water Resources Control Board (State Board) issued a draft "Low-Threat Underground Storage Tank Case Closure Policy" (Policy) for the purpose of establishing consistent statewide case closure criteria for UST cases; and

WHEREAS, the District generally supports the efficient and consistent closure of low-threat UST cases in California when the closure of those cases will not have a negative impact on the water quality of vulnerable groundwater basins that are actively used as a resource for potable water; and

WHEREAS, the case closure criteria in the Policy would allow thousands of UST cases to be closed state-wide, including the majority of the approximately 138 UST cases within the District, with elevated concentrations of petroleum hydrocarbons remaining in groundwater basins that are actively used as a source of drinking water, such as the Niles Cone Groundwater Basin; and

WHEREAS, closing UST cases that continue to have elevated concentrations of petroleum hydrocarbons in groundwater would require local agencies, utilities, and groundwater management agencies, such as the District, to manage and track contamination at these sites in the future in order to protect public health and the environment from residual contamination left in place at these sites for decades to centuries, and would unfairly transfer the burden and expense of these activities from the responsible parties to local agencies, such as the District;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Alameda County Water District hereby urges the State Board to modify the draft Policy to provide an exemption for groundwater basins that are actively used as a drinking water supply by local residents and businesses, and are vulnerable to contaminants due to a highly permeable shallow aquifer that is used as a source of drinking water, or are more vulnerable to groundwater contamination due to minimal, or absence of, a natural clay barrier to prevent contamination from impacting drinking water aquifers; and

BE IT FURTHER RESOLVED that the Board of Directors of the Alameda County Water District hereby urges the State Board to modify the draft Policy to address the cumulative impact on water quality and groundwater resources from closing numerous cases with elevated concentrations of petroleum hydrocarbons in groundwater that exceed the water quality objectives set forth in the Water Quality Control Plans (Basin Plans) adopted by the State Board; and

BE IT FURTHER RESOLVED that the Board of Directors of the Alameda County Water District hereby urges the State Board to modify the draft Policy to ensure that the burden and expense associated with tracking groundwater plumes containing petroleum hydrocarbons remains with the party responsible for contaminating the property and is not placed on local agencies, residents, and businesses.

PASSED AND ADOPTED this 8th day of March 2012, by the following

vote: AYES: Directors Gunther, Huang, Koller, Sethy, and Weed

NOES: None

ABSENT: None

/s/ JOHN H. WEED
John H. Weed, President
Board of Directors
Alameda County Water District

ATTEST:

/s/ GINA MARKOU
Gina Markou, District Secretary
Alameda County Water District
(Seal)

APPROVED AS TO FORM:

/s/ PATRICK T. MIYAKI
Patrick T. Miyaki, Attorney
Alameda County Water District

ATTACHMENT 2

ACWD Comments for
Substitute Environmental Document

The Alameda County Water District (ACWD) has reviewed the draft Substitute Environmental Document (SED) dated January 31, 2012, and would appreciate your consideration of the following comments:

Baseline Analysis

The SED (pp. 16, 17, 27, 28, 29 and 38) provides that existing petroleum in the subsurface and petroleum-impacted groundwater that exists at the UST site are the "baseline" conditions. We believe the use of the existing contaminated condition as the baseline for the SED 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 California Environmental Quality Act (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. Further, "[w]here a proposed project is compared with an adopted plan, the analysis shall examine the existing physical conditions at the time the notice of preparation is published . . . as well as the potential future conditions discussed in the plan." 14 CCR §15125(e).

The proposed Low-Threat Underground Storage Tank Case 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 UST 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. See 14 CCR §15125(e). This would be more in line with the overriding purpose of 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. 37-38) with existing petroleum hydrocarbon impacted sites permeates the analysis of the quality of the environment in the SED and the findings of no impacts under the mandatory findings of significance. By treating the existing conditions as the "baseline," the SED artificially limits the impacts the changes from the existing policy and procedures for UST cleanup 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 SED (p. 29), “[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.

SWRCB Resolution 92-49

The SED is inconsistent with existing SWRCB Policies and Procedures for waste discharge and restoration of effected waters. In an effort to justify allowing UST site closure with petroleum left in place above the WQOs, the draft SED and draft Policy cites SWRCB Resolution 92-49, *Policies and Procedures for Investigation and Cleanup and Abatement of Discharges Under Water Code Section 13304*, stating the unauthorized releases must "attain either background water quality or the best water quality reasonable if background water quality cannot be restored." p. 2.

- The use of “background" as an existing condition in the draft SED is inconsistent with the use of "background" in Resolution 92-49, which means "the water quality that existed before the discharge."

- Assuming that water quality that existed before the discharge cannot be obtained, it does not necessarily follow that allowing petroleum left in place above the WQOs is the best water quality reasonable. Further, closing UST sites with "more petroleum left in place than under current practices" does not provide for the best water quality reasonable.

- Resolution No. 92-49 in approving alternative cleanup levels less stringent then background (i.e. water quality that existed before the discharge), requires that any such cleanup level shall not unreasonably effect present and anticipated beneficial use of water. As addressed later in this attachment and in ACWD's comment letter to the scoping document, the Policy does not adequately address impacts to groundwater resources.

- Resolution 92-49 provides that where attainment of applicable water quality objectives for groundwater cannot reasonably be achieved, the establishment of containment zones is appropriate. Here, the draft Policy provides for petroleum to be left in place above WQOs, but allows case closure and requires destruction of monitoring wells instead of establishing monitoring and containment zones.

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 SED contains several provisions that potentially impact ACWD water resources:

- p. 4 - the SED states that the proposed policy "will cause changes in the timing of activities that normally occur in the corrective action process."

- p. 5 - the SED 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. 29 - the SED states that the proposed Policy would allow petroleum to be left in place above WQOs.

The SED fails to address the potential impacts that the change in timing of corrective actions may have on groundwater resources. Likewise, the SED 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 SED (p. 29) 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.

Environmental Setting

CEQA Guidelines state that the project "must include a description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective." (14 CCR §15125) However, the environmental setting provided in Section 3.D., Baseline (p. 16) only provides a very generalized description of the environmental conditions existing at the approximately 8,500 active (open) UST cases as follows: "These active cases span a broad range of release volume, volume of contaminated groundwater, threat to surface receptors, and other characteristics. Some cases have petroleum impacts limited to soil only, while others may have plumes of dissolved contaminants in groundwater that extend for hundreds or thousands of feet. Likewise, potential receptors that might be impacted by the release could be located close to the site or miles away." There is no description provided as to: a) how many of these 8,500 sites have groundwater concentrations exceeding one or more drinking water standards; b) the range of groundwater contaminant concentrations that currently exist in soil and groundwater at these sites; c) the proximity of these sites to private and public water supply wells; and d) other environmental impacts associated with these sites (e.g., vapor intrusion, direct contact, etc.). This lack of description of the "baseline" environmental conditions that exists at these sites makes it difficult or impossible for the reader to understand the consequences of the Policy at both the local and regional perspective. The proper description of the environmental setting is important because it helps to determine whether an appropriate baseline is being used, which in turn determines if there are significant environmental impacts resulting from the Policy. If the Environmental

Setting is inappropriately generalized or incorrectly represented, then conclusions made by the SED are consequently invalid. This in turn impacts the analysis of reasonable alternatives to the project and mitigation measures to avoid or reduce any potentially significant adverse environmental impacts required under 23 CCR §3777 and 14 CCR §15252.

Specific Comments

1. **Section 4, Environmental Impacts**

   The draft SED at page 17 provides that "[e]nvironmental impacts as a result from complying with the proposed Policy are no different from the impacts that are reasonably foreseen as a result of the project itself." This self-serving statement fails to address the fact that there will be environmental impacts, not directly by complying with the relaxed standards in the draft Policy, but from the required change to the current closure practice. Allowing closure of UST sites with "more petroleum left in place than under current practices" will cause physical changes in the environment that have not been adequately addressed in the draft SED as required by CEQA Guideline §15064. The SED fails to address cumulative impacts, reasonable alternatives to the project, and mitigation measures to avoid or reduce any significant or potentially significant environmental impacts as required under 23 CCR §3777 and 14 CCR §15252.

2. **Section 4.6, 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 810 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 SED also fails to address the fact that closing UST 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 SED designation for Geology and Soils, Item (a), be changed to reflect a Potentially Significant Impact.

3. **Section 4.8, Hazards and Hazardous Materials**

Item (d) states that there would be a less than significant impact from the Policy (closing UST 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 UST 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 SED designation for Hazards and Hazardous Materials, Item (d), be changed to reflect a Potentially Significant Impact.

4. **Section 4.9, 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 UST 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 SED designation for Hydrology and Water Quality, Items (a) and (f), be changed to reflect a Potentially Significant Impact.

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 UST 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 SED evaluates the cumulative effects of reduced storage capacity (i.e., depletion of groundwater supplies) on groundwater basins throughout the State.

The SED 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. Therefore, ACWD requests that the SED designation for Hydrology and Water Quality, Item (b), be changed to reflect a Potentially Significant Impact.

5. **Section 4.10, 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 SED, the rationale presented to assert that there would 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 SED 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 regarding notification to the appropriate agencies of proposed changes in future land uses at sites with residual contamination. Leaving higher concentrations of residual contamination in place to degrade could increase the public's exposure. 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. Therefore, ACWD requests that the SED designation for Land Use and Planning, Item (b), be changed to reflect a Potentially Significant Impact.

6. **Section 4.17, 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 UST cases reaching a water supply well. Closing UST 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 UST 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 SED designation for Utilities and Service Systems, Item (b) be changed to reflect a Potentially Significant Impact.

7. **Section 4.18, Mandatory Findings of Significance**

The SED, 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] 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 UST sites within the various groundwater basins throughout the State, and that one has to consider the cumulative impacts

[1] However, as discussed below, it treats the existing condition as the "baseline" when addressing potentially negative 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 138 open UST sites with groundwater impacts. ACWD anticipates the majority of these cases 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 UST sites. There is no method for addressing impacts to groundwater resulting from the closure of numerous UST sites under the Policy. Therefore, ACWD requests that the SED designation for Mandatory Findings of Significance be changed to reflect a Potentially Significant Impact.

8. **Section 5, Alternatives to the Project**

The SWRCB has determined that no fair argument exists that the Project could result in any reasonably foreseeable significant adverse environmental impacts, and the draft SED did not identify or analyze any alternatives, p. 39.

- The alternatives analysis in the draft SED is inadequate under 23 CCR §3777. An alternatives analysis is required for a substitute environmental document. CEQA Guidelines §15252(a)(2)(A). The determination that no fair argument exists that the Project could result in any reasonably foreseeable significant adverse environmental impacts is premised on a baseline of existing conditions, which fails to address the impacts from the change in the Policy.

- Particularly troubling is the fact that the draft SED fails to address the "no project" alternative under CEQA Guidelines §15126.6(e). "The purpose of describing and analyzing a no project alternative is to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." *Id*. The no project alternative analysis is different than the baseline conditions, and addresses existing conditions as well as what is reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure.

- Here, where the project is the revision of an existing regulatory plan, policy or ongoing operation, the “no project” alternative will be the continuation of the existing plan, policy or operation into the future. Thus, the projected impacts of the proposed plan or alternative plans should be compared to the impacts that would occur under the existing plan. The draft SED fails entirely to make this comparison and to provide the decision makers and the public with basic information on the project.

9. **Public Water System's Participation in the Implementation of the Policy**

The SED (p. 3; *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.

ATTACHMENT 3

ACWD Comments for the
Draft Low-Threat UST Case Closure Policy

The Alameda County Water District (ACWD) has reviewed the draft Low-Threat Underground Storage Tank Case Closure Policy (Policy) dated January 31, 2012, and would appreciate your consideration of the following comments:

General Comments

1. **Residual Soil Contamination**

   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 810 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 Policy fails to address the fact that closing Underground Storage Tank (UST) 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, and/or 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.

2. **Impacts to Water Quality and Groundwater Resources**

   Closing cases with elevated concentrations of petroleum hydrocarbons in groundwater will have a negative impact on water quality and groundwater resources. Further, the Policy 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 Water Quality Objectives (WQOs) have been achieved, which may take tens to hundreds of years before natural attenuation will reduce the contaminants to acceptable levels. The Policy 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 Policy evaluate the

cumulative effects of reduced storage capacity (i.e., depletion of groundwater supplies) on groundwater basins throughout the State.

The Policy 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.

3. **Impacts to Land Use and Planning**

The proposed Policy does not take into account potential impacts to land use and planning 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 Policy 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 regarding notification to the appropriate agencies of proposed changes in future land uses at sites with residual contamination. Leaving higher concentrations of residual contamination in place to degrade could increase the public's exposure. 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 proposed projects, if not completely deter them from occurring.

4. **Impacts to Utilities and Service Systems**

The Policy 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 UST cases reaching a water supply well. Closing UST 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 UST 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.

5. **Cumulative Impacts From Closing Numerous Cases**

The Policy does not address the potential cumulative water quality and natural resource impacts resulting from the implementation of the Policy. 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 near contaminated groundwater sites.

The Policy needs to recognize that there are numerous open UST 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 138 open UST sites with groundwater impacts. ACWD anticipates the majority of these cases 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, and/or 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 resulting from 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 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 UST sites. There is no method for addressing impacts to groundwater resulting from the closure of numerous UST sites under the Policy.

6. **Public Water System's Participation in the Implementation of the Policy**

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.

Specific Comments

1. **Groundwater Closure Criteria**

As stated previously, 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. In addition, 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.

The five classes of sites specified in the groundwater criteria of the draft Policy appear to be somewhat arbitrary with respect to the distance from the plume to the nearest existing water supply well, as well as the concentration limits specified for benzene and methyl tertiary butyl ether (MTBE). What is particularly disturbing is that the "Technical Justification for Groundwater Plume Lengths, Indicator Constituents, Concentrations, and Buffer Distances (Separation Distances) to Receptors" document attached to the Draft Policy dated July 14, 2011, asserts that the "Policy is consistent with other State and local practices regarding impacts to groundwater caused by other anthropogenic releases." The example given to support this assertion references the "Minimum Horizontal Separation Distance Between

Well and Known or Potential Source" (p. 12) contained in the Department of Water Resources' California Well Standards (Bulletin 74-90) dated June 1991. However, the separation distances or "setbacks" referenced in Bulletin 74-90 are for microbiological contaminants associated with sewers, septic tanks, leach fields, cesspools, and animal enclosures. It is misleading and inappropriate to compare separation distances for microbiological contaminants to petroleum hydrocarbon plumes, particularly MTBE, which is much more mobile in groundwater and likely to have a significantly longer plume length. Similarly, Assertion #2 of the External Scientific Peer Review document dated December 8, 2011, states that "[the] Policy requires a separation distance from the edge of a stabilized petroleum plume to an existing well that is more protective than Department of Water Resources (DWR) well standards," which is also misleading. It is also important to note that the referenced DWR well standards were published in 1991, which is several years prior to the threat of MTBE in groundwater was identified and fully understood.

The Policy needs to recognize that there are numerous open UST 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. ACWD supports the closing of low-threat UST cases in California in principle; however, we recommend that the groundwater closure criteria be based on the vulnerability of the groundwater basin and whether the groundwater basin is actively used as a public drinking water source. At a minimum, the Policy should take into consideration the California Department of Public Health's (CDPH) approved Groundwater Protection Zones for public water supply wells.

An alternative groundwater closure criteria approach is outlined below:

***Closure Based on Vulnerability and Existing Use of Groundwater Basin**:*

a) If impacted aquifers are <u>not</u> actively used as a source of drinking water: No change to the groundwater closure criteria in the draft Policy.

b) If impacted aquifers are actively used as a source of drinking water: Require more stringent groundwater cleanup concentrations and greater separation distances.

c) If impacted aquifers are actively used as a source of drinking water and are more vulnerable to groundwater quality degradation [e.g., shallow drinking water aquifer (50 to 100 feet below ground surface) and minimal, or absence of, a natural clay barrier to prevent contamination from impacting drinking water aquifers]: Require most stringent groundwater cleanup concentrations (e.g., drinking water standards) and greater separation distances.

2. One of the "General Criteria," Section (a) (p. 3) that must be satisfied for a site to be considered for closure is titled "*[*t]he unauthorized release is located within the service area of a public water system." The description for this section further states that "this policy is protective of existing water supply wells." However, this section has nothing to do with

protecting existing supply wells. The rationale for this section appears to be somewhat flawed since it seems to be based on the presumption that new water supply wells will only be installed in rural areas that are undergoing development. This is simply not the case. In fact, in the past ten years, ACWD has added six new public water supply wells to our public water system.

General Criteria (a) further states that "[n]ew water supply wells are unlikely to be installed in the shallow groundwater near former UST release sites." To assume that new water supply wells will not be installed in "shallow" groundwater in urban areas served by a public water system is also flawed. The Newark Aquifer, which is the shallowest regional drinking water aquifer utilized by ACWD, is an extensive permeable gravel and sand aquifer between 40 and 140 feet below ground surface, except in the forebay area where it begins at the surface. Two of the six new ACWD water supply wells added to the public water system are installed in the Newark Aquifer, with screens located as shallow as 50 feet below ground surface. What is also troubling is the assertion that new water supply wells are unlikely to be installed "near former UST release sites." As noted previously in this document, ACWD is very concerned with the inability to develop new groundwater sources near UST sites that would be closed under the Policy with elevated concentrations of contaminants in groundwater (which could be thousands of sites throughout the State, and greater than 100 sites within ACWD). In addition, local regulatory agencies would now have the added cost of tracking closed sites.

Some public water systems use groundwater as a major portion of its supply, so it doesn't matter if a site is located in an area with a public water system. In fact, it puts the site at a higher risk category if it is located in a service area with a public water system that uses groundwater. Instead of stating that "[t]his policy is limited to areas with available public drinking water supplies to reduce the likelihood that new wells in developing areas will be inadvertently impacted by residual petroleum in groundwater"; the policy should state that it should **not** be applied in areas where shallow groundwater (e.g., at depths less than 100 feet below ground surface) is used as a source of public drinking water supply.

3. "Criteria for Low-Threat Case Closure," page 2, last paragraph states that "this policy recognizes that some petroleum-release sites may possess unique attributes and that some site specific conditions may make case closure under this policy inappropriate." Additional details are needed to describe the "unique attributes" that are necessary to determine that a site may not be appropriate for closure, including some examples.

4. WQOs are referenced in the groundwater criteria five classes of sites (p. 6) to determine plume length; however, the contaminants of concern and their respective WQOs are not listed. It would be useful to list all of the petroleum hydrocarbon constituents [i.e., benzene, toluene, ethylbenzene, xylenes, TPH-gasoline, TPH-diesel, MTBE, tertiary butyl alcohol (TBA), and other fuel oxygenates] that will be used to determine plume length and list the respective WQO. This is particularly important for petroleum hydrocarbons that are not

specifically listed in the various Water Quality Control Plans (Basin Plans), such as TPH-gasoline, TPH-diesel, and TBA.

5. The groundwater criteria buffer distances (p. 6) between the defined plume boundary and the nearest existing water supply well are inconsistent (e.g., 250 feet for a plume less than 100 feet in length; 1,000 feet for a plume less than 250 feet in length; and 1,000 feet for a plume less than 1,000 feet in length) and no rationale is provided for the various buffers. It seems logical that longer plume lengths necessitate greater buffer distances between the plume boundary and a water supply well.

6. TBA concentrations should also be included in the groundwater classes since TBA is commonly the maximum contaminant detected at the plume boundary.

7. The eight General Criteria listed in the Policy should be expanded to include a specific requirement that the lateral and vertical extent of soil and groundwater contamination must be completely defined. ACWD recognizes that this requirement should be addressed in the Conceptual Site Model (CSM); however, since the first draft Policy was released it is becoming more commonplace for sites to resist the need to further define the extent of contamination, particularly where groundwater concentrations are below the benzene and MTBE concentrations listed in the groundwater criteria.

8. The Policy should make it explicitly clear that any low-threat UST case closure request to a regulatory agency must be accompanied by a technical report that addresses **ALL** of the general and media-specific criteria listed in the Policy, with particular emphasis on the need for a thorough and comprehensive CSM, and that all secondary source(s) have been remediated.

9. The term “water supply well” used in the Policy needs to be defined to include public and private drinking water wells, irrigation wells, agricultural wells, industrial supply wells, etc. The Policy should also address current and future potential impacts from dewatering wells.