



ENVIRONMENTAL HEALTH SERVICES
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March 19, 2012

Jeanine Townsend, Clerk to the Board (Sent via email to [con](mailto:jeanine.townsend@swrcb.ca.gov))
State Water Resources Control Board
1001 I Street
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[gov](http://www.swrcb.ca.gov))

Subject: Alameda County Environmental Health Local Oversight Program Review Comments on Low-Threat Underground Storage Tank Closure Policy dated January 31, 2012

Dear Ms. Townsend:

We thank the State Water Resources Control Board staff for the opportunity to comment on the, "*Low-Threat UST Closure Policy*," dated January 31, 2012 and support the State's effort to provide meaningful guidance for low threat underground storage tank (UST) case closure. However, we believe that the draft Policy requires additional thought in the areas addressed within the comments below. We welcome the opportunity to provide more detailed input or comments at a later date when revisions may be considered.

COMMENTS

1. **Site Characterization** – We concur with the November 2011 Supplementary Comments on the Policy by the Office of Environmental Health Hazard Assessment (OEHHA) regarding the need to explicitly state in the Policy that sites must be fully characterized in order to apply the Policy. As the Policy is currently written, its readers could conclude that site characterization should focus on the narrow closure parameters considered in the Policy. We urge revision of the Policy to be explicit with regard to the need for adequate site characterization. We previously suggested modifications that articulated this clarification to the Policy.
2. **Nuisance Criteria** – The definition of nuisance conditions in Water Code Section 13050, which is cited in the Policy, is necessarily in order to be valid over a wide range of circumstances and conditions. Due to the intentionally vague nature of this definition, individual users of the Policy are likely to come to different conclusions as to whether nuisance conditions exist or not it seems conflicting to use an intentionally vague criteria to define a very specific condition. The Policy would be better served by more appropriate criteria, ones that are specifically applicable to fuel leak sites and will help to reduce the uncertainty of when nuisance conditions exist. More importantly, the use of more specific criteria would address conditions that do not appear to be considered in the Policy. As an example, only benzene, ethylbenzene, and naphthalene are considered for evaluation of direct exposure risks at fuel leak sites. If the concentrations of these three compounds are less than the screening criteria in the Policy, the site could be closed under the Policy regardless of the presence of other petroleum hydrocarbon constituents and the risk, threat, or nuisance they pose.
3. **Secondary Source Removal** – We believe this section of the Policy can be improved by revising the definition of the secondary source. As currently written, the secondary source is restricted to "soil or groundwater located at or immediately beneath the point of release from the primary source." This can be interpreted as limiting secondary source removal to minor excavation directly beneath a UST

during tank removal and not actual remediation of a secondary source. We suggest that the intent of this section be defined.

4. **Presumptive Approach** – The Preamble section of the Policy appears to emphasize through past experience that UST sites do not pose a risk to human health, safety, or the environment. This emphasis (found throughout the Policy) leaves the impression that case closure should be a presumptive process. References to site characterization are limited and vague. We believe the overall tone of the Policy in this regard should emphasize adequate characterization and evaluation to determine whether a given site is actually a “low-threat” site.
5. **Roles and Responsibilities of Environmental Professionals** –. Environmental professionals hired by the responsible party typically have the most detailed knowledge of a site. Historically, the responsible party and environmental professionals working on the site have been responsible for characterizing and assessing the site to demonstrate that the site is ready for closure. The Policy should emphasize that this role remains intact and the responsibility to identify any conditions that precludes use of the draft Policy remains with the responsible part. We recommend that the Policy clarify and expand the roles and responsibilities of environmental professionals and articulate the limited role of regulatory agencies to characterize and assess sites.
6. **Future Use of Groundwater** –. We believe that future use of groundwater must be considered in the Policy. The Policy proposes that UST sites with groundwater contamination will be closed unless an existing water supply well is nearby or the plumes exceed an arbitrary size. The potential future use of groundwater is not given consideration. Although there are many hydrogeologic settings where the shallow groundwater at UST sites is unlikely to be used in the future and active restoration of the groundwater is not necessary, there are also many areas with valuable groundwater resources that require protection for future groundwater use. The Policy should be revised to include provisions for considering future groundwater use in the closure of UST cases.
7. **Closing Sites without Evaluation of the Potential for Vapor Intrusion** – The Policy assumes no evaluation of potential vapor intrusion is required if certain exclusion criteria are met. As an example, no direct measurement of soil vapor would be necessary for a site with 5 feet or more of clean soil (clean soil is defined as TPHg concentrations less than 100 milligrams per kilogram present between the bottom of the building and the shallowest impacted soil or groundwater), greater than 4% oxygen at a depth of 5 feet, and less than 1,000 micrograms per liter of benzene in groundwater. The criteria assume static conditions. We do not believe the cited criteria and the assumption of static conditions are sufficient to conclude there is no potential for vapor intrusion. We do not believe that the prescribed data for describing clean soil and oxygen are reliable indicators that can be used without consideration of other lines of evidence. There is an insufficient technical basis to use this type of simplified criteria without consideration of such factors as source strength, preferential pathways, soil moisture, and the potential for groundwater to rise over time. Moreover, there is no statement regarding the adequacy of site characterization data to apply the prescribed criteria and assumptions.
8. **Transferring Risks and Liabilities to Future Owners and Site Users** – The Policy proposes closing sites that may have high concentrations and large masses of residual contamination if the site meets the proposed prescriptive criteria and the site is considered a “low threat” under current conditions and assumptions regarding building occupancy. Effectively, the Policy transfers risks and liabilities from residual contamination to future owners and site users without a mechanism for controlling or managing those risks if site conditions or land use change. We believe that this

approach does not provide adequate protection for future owners and site users and requires revision to include provisions for future site management.

9. **Consideration of Only Four Petroleum Constituents in Table 1** – Table 1 of the Policy selects four out of hundreds of petroleum hydrocarbon constituents to assess human health risk in soil. This limited consideration is contrary to most risk-based training provided by many agencies inclusive of the U.S. Environmental Protection Agency, California Department of Toxic Substances Control, and the Regional Water Quality Control Boards. Consideration of additional petroleum hydrocarbon constituents would make use of multiple lines of evidence and lead to more technically sound decisions.
10. **Testing for MTBE** – The Policy requires testing and reporting of MTBE in accordance with Health and Safety Code section 25296.15; however, MTBE is not a chemical of concern on Table 1. This omission implies that any concentration of MTBE in soil may be acceptable.
11. **Urban Shallow Wells** - The Policy does not protect the currently exercised water rights of property owners with existing "backyard" residential wells present in older areas of the urban East Bay, and the water rights of urban property owners of the state. Such older existing wells are far more likely to be shallow. Previous state policy (non-degradation) worked to protect those rights; this Policy does not protect existing rights and does not address removal of this right from parties exercising this right currently.

We thank you for the opportunity to comment upon the Policy and look forward to participating in its continuing development. Like all landmark policy decisions, the low threat closure policy is extremely detail rich but it is in the details that successful usable policy is developed. If you have any questions regarding these comments, please call Jerry Wickham at (510) 567-6791 or Donna Drogos at (510) 567-6721.

Sincerely,

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Director

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