

Response to Comments Received from ACWD Regarding International Windows,  
in a Letter Dated February 25, 2014,  
Located at 30526 San Antonia Street, Hayward, Claim 3205

Comment 1:

The Summary states “The petroleum release is limited to the soil and shallow groundwater.” This is misleading. The vertical extent of the groundwater contamination is not defined beneath this site. It is unknown if the petroleum release is limited to shallow groundwater since a deeper groundwater investigation has not been conducted to determine if the deeper water-bearing zone is impacted.

Response 1: The case has been open 26 years. In that time, a number of issues raised in comments by the regulatory agency could have been addressed, if they were of significant concern. At a relatively shallow depth beneath the Site there is a well-documented aquitard that separates shallow groundwater from the drinking water aquifer beneath the aquitard. It seems inappropriate to jeopardize the drinking water aquifer by drilling through the aquitard when dealing with contaminants that are less dense than water and no nearby means (public supply well(s)) to draw shallow water downward. Therefore, additional drilling is inappropriate.

Comment 2:

The Summary states “No other water supply wells have been identified within 250 feet of the plume boundary in files reviewed.” There has been no effort to properly identify all the water wells (public and private) near the site. A sensitive receptor survey has not been conducted for this site. It is misleading to state that no other water supply wells have been identified in files reviewed when the files do not contain a well survey report. It is also questionable if a 250 feet sensitive receptor survey is appropriate for this site, since the plume length may be greater than 100 feet (see Item 4).

Response 2: The Site is located in an industrial/manufacturing area that was undeveloped land prior to current use. The presence of private supply wells is highly unlikely, and there are no public supply wells identified by the California Department of Public Health database.

Comment 3:

The Summary states “Water is provided to water users near the Site by the Alameda County Water District.” The ACWD does not provide water service to this site or the immediate surrounding properties.

Response 3: Agreed – The City of Hayward supplies water in this area and this will be corrected in the Summary Report.

Comment 4:

The Summary states “The case meets Policy Criterion 1 by Class 1. The contaminant plume that exceeds water quality objectives is less than 100 feet in length.” The Summary estimated the plume length by disregarding the contaminants detected in down-gradient well MW-6. The Summary further states that “The petroleum hydrocarbons identified in well MW-6 is considered to be a separate and different release not associated with the USTs because of the distinct difference in components and concentrations when compared to the data from the UST release.” Although the Summary’s conclusion is possible, the Summary did not provide adequate data to support its conclusion. The Summary did not identify any documented use of gasoline or diesel in the onsite manufacturing operation, nor storage or spillage of petroleum fuels near MW-6. MW-6 is located down-gradient of the USTs, in line with the groundwater gradient. Even though the concentrations are different, the major contaminants detected (i.e., gasoline, diesel, ethylbenzene, xylenes and naphthalene) at MW-6 are the same as those detected historically at MW-2 located near the former USTs. Furthermore, several unauthorized releases associated with the USTs were documented over the years. The first release was observed during a 1986 well installation when free product was documented during the drilling of the well. It was unclear when the release occurred or from which UST. At that time, one UST contained gasoline and the other contained diesel. In 1988, another unauthorized release was reported after the tanks failed a pressure test in March and again in May. At that time, both tanks contained diesel fuel. In 1990, another unauthorized release report was filed as additional contamination was discovered during the tank removal. Potentially, the relatively higher contaminant concentrations detected at MW-6 may reflect the timing, volume, and/or different fuel types present during each of the historical releases and the subsequent soil excavation. Since it appears that the USTs are the source (or one of the sources) of the contaminants detected at MW-6, then the groundwater plume is undefined and the plume length is greater than 100 feet.

Response 4: Based on the analytical results for well MW-6 ethylbenzene and xylene are the only gasoline constituents identified. Not having identified the more mobile MTBE, benzene and toluene provides ample evidence the ethylbenzene and xylene concentrations found in MW-6 are the result of a chemical spill within the manufacturing facility and not related to the UST release.

Comment 5:

The Summary states “There are no soil sample results in the case record for naphthalene. However, relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline.” Since data indicates that there were releases from both the diesel and the gasoline USTs, the relative concentrations of naphthalene and benzene in gasoline is inadequate to predict the naphthalene concentration for this site; especially when diesel fuel may contain a higher percentage of naphthalene than gasoline and almost no benzene (Leaking Underground Fuel Tank Guidance Manual, September 2012).

Response 5:

Compounds identified (benzene, toluene, ethylbenzene, xylene, and MTBE) in the EPA Analytical Methods used at this Site share one thing in common, they are found primarily in gasoline, and as such, serve as useful indicators of contamination from gasoline sources. Naphthalene is a volatile, aromatic compound that is an intentional component of gasoline. Diesel fuel is largely composed of semi-volatile, aliphatic compounds. It is true that there are a variety of volatile, aromatic compounds in diesel fuel such as naphthalene. These however exist in lower levels than found in gasoline and other lighter fuels. The soil data collected is therefore adequate.

Comment 6:

The Summary concludes the groundwater plume is laterally defined and stable based on the unconfirmed theory that the petroleum contaminants detected at MW-6 are not associated with the UST. Again, MW-6 is located down-gradient from the USTs, no other potential sources have been identified, and the fuel components detected are similar to those historically detected at the source well MW-2. There is not enough data presented to completely exclude the USTs as a source (see Item 4). If the USTs are not considered to be the source, then additional source area investigation(s) are needed.

Response 6: No, if any additional assessment of the source of the ethylbenzene and xylene concentrations identified in well MW-6 are deemed necessary it would be in the area of MW-6, not in the area of the UST.

Comment 7:

The Summary states “It seems an unnecessary risk to drill into the drinking water aquifer below the affected saturated zone and to thereby install potential conduits for shallow affected groundwater to impact the deeper drinking water zone.” Per the Policy, one of the fundamental elements of a Conceptual Site Model (CSM) is to collect data to characterize the nature, extent and mobility of the release. Since groundwater contamination moves both laterally and vertically, it follows that the vertical extent of the contaminant plume needs to also be defined as part of the CSM. The Summary recognized that a drinking water aquifer, which is a sensitive receptor, is present beneath the impacted zone, yet is not requiring the characterization of the hydrogeological relationship between the two water bearing zones or to determine if the deeper water-bearing zone is impacted. Drilling through impacted shallow water-bearing zones at LUFT sites for vertical plume definition is neither new nor unusual. The risk of cross-contamination can be abated by following the established well ordinance standards and using appropriate technology such as conductor casings and dual-tube drilling methods.

Response 7: Same as Response 1 above.