Response to Regional Water Board Comments Regarding Closure of Fast Lane Mini Mart Located at 201 Elmo Highway, McFarland, Memorandum dated February 10, 2014 Claim 18480

In an email dated July 28, 2014 the Regional Water Board staff declined participating in a conference call to discuss their concerns regarding closure of this case. "Our objections to the closure are presented in a Memorandum dated February 10, 2014 and have been incorporated into the RSR."

<u>Comment 1</u>. The professional health-risk assessment referred to is not part of the case file. A report signed by a registered professional evaluating the site-specific health risk from the potential exposure to residual soil contamination based on historical information is not part of the case record, supporting documentation and data is lacking, the professional who performed the assessment is not disclosed.

<u>Response 1</u>. A professional assessment of site- specific risk from potential exposure to residual soil contamination was performed. This assessment was performed by UST Cleanup Fund Staff. The basis for the conclusion that Policy Criterion 3b is met is that soil was excavated to a depth of 10 feet in the areas of the USTs, soil vapor extraction and air sparging remediation have occurred, the site is paved, and any construction worker will be prepared for an exposure in their normal daily work.

<u>Comment 2</u>. Excavation to more than 10 feet bgs is documented for the 2004 removal of the USTs, but impacted soil beneath the dispensers was removed to approximately two to three feet bgs, according to geologic cross sections included in the case file. Shallow soils beneath the dispenser island are characterized as silt in the cross sections, a soil less permeable that sand that could have retained gasoline constituents after soil vapor extraction and air sparging remediation from 2010 through 2012.

<u>Response 2</u>. Soil vapor extraction and air sparging remediation took place between 2010 and 2013, groundwater has not been impacted requested and first groundwater is at 129 feet bgs. The site is paved, thus preventing incidental contact or ingestion and any construction worker will be prepared for an exposure in their normal daily work.

<u>Comment 3</u>. Ethylbenzene was detected at 7.29 milligrams per kilogram in a sample collected at two feet bgs beneath a fuel dispenser during 2004 UST upgrade activities. This concentration exceeds all the Direct Contact and Outdoor Exposure Commercial/Industrial screening levels contained in Table 1 of the Policy.

<u>Response 3</u>: Presence of ethylbenzene at a concentration of 7.29 mg/kg meets all the criteria listed in Table 1. In addition, concentrations in 2015 following soil remediation from 2010 through 2013 are reasonably much lower than in 2004.

<u>Comment 4</u>. Naphthalene concentrations were not reported. Concentrations may have decreased below the screening levels by natural attenuation of active remediation, but verification data has not been collected. By letter 15 August 2013, Central Valley Regional

Water Board staff concurred with a work plan for additional shallow soil sampling to determine whether the Direct Contact and Outdoor Air Exposure criteria are satisfied. <u>Response 4.</u> There are no soil sample results in the case record for naphthalene. However, the relative concentration of naphthalene in soil can be conservatively estimated using the published relative concentrations of naphthalene and benzene in gasoline. Taken from Potter and Simmons (1998), gasoline mixtures contain approximately 2 percent benzene and 0.25 percent naphthalene. Therefore, benzene can be used as a surrogate for naphthalene concentrations with a safety factor of eight. Benzene concentrations from the Site are below the naphthalene thresholds in Policy Table 1. Therefore, the estimated naphthalene concentrations meet the thresholds in Table 1 and the Policy criteria for direct contact by a factor of eight. It is highly unlikely that naphthalene concentrations in the soil, if any, exceed the threshold.