Dante,

After review the workplan on the "LNAPL Characterization Work Plan - Groundwater Contamination Source Areas 3, 6, 11 and 12 Del Amo Superfund Site" prepared by URS, the followings are DTSC's comments.

1: URS proposes using the Ultra-Violet Optical Screening Tool (UVOST) to map the hydrocarbons in the subsurface at Del Amo to achieve two objectives: (1) delineate the lateral and vertical extent of LNAPL at each of the four source areas and, (2) further evaluate the composition of the LNAPL at each source area. While DTSC does not object URS use of UVOST as a screening tool for possible presence of hydrocarbons at the subject site, DTSC points out that the method is an indirect sensing tool. The results are not always reliable for mapping free phase benzene, toluene and xylenes; are of limited value for dissolved phase hydrocarbons; and will not detect vapor phase hydrocarbons. The method also experiences interferences from naturally occurring soils such as shell layers that generate fluorescence with absence of any hydrocarbons. Thus, the data obtained from UVOST has certain limited use and requires appropriate interpretation. In order to overcome this limitation and to achieve the desired objectives, DTSC recommends URS use the Membrane Interface Probe (MIP) together with UVOST technique as a complementary approach. Membrane Interface Probe incorporating the use of flame ionization detector (FID), photo ionization detector (PID) and electron capture detector (ECD) with soil conductivity data will allow URS to directly measure the presence of VOCs with fewer limitations and better resolution. If the cost hinders this suggestion, at a minimum, the application of MIP with UVOST can be applied on certain selected locations where higher concentrations of hydrocarbons are believed to be present.

2: In order to provide better areal coverage for site characterization for source area 6 in Figure 3 for LNAPL, DTSC Recommends to add one UVOST location in the vicinity of CPL0059 to investigate if the LNAPL plume migrates under the building or not.

3: Similar to Comment 2 for firming up the LNAPL plume limit and assuming access is not an issue, DTSC suggests adding two additional UVOST locations for source area 3 shown in Figure 2. One is recommended to be located at about 30' to 40' west of the most upper left proposed UVOST location to define the lateral extent near the soil boring SBL0071 (NW). The other one is near the immediate vicinity of soil boring of SBL0079 (SE) for better delineation of the LNAPL plume boundary.

4: DTSC concurs with the proposed selection of boring locations based on UVOST locations showing the greatest average hydrocarbon signature for each source area as well as the consultation with regulators prior to initiation of drilling.

5: Extreme care should be exercised when taking the Encore samples from coarse-grained soil cores to ensure no potential vaporization will occur during sampling. URS may wish to augment the Encore samples with field preservation using pre-tared vials containing water, or sodium bisulfite...
solution. Field personnel should be trained in the use of EPA Method 5035 sampling.

If you have any question, please let us know.

Thanks

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