

## Plunkett, Steven, Env. Health

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**From:** Bud Duke [BDuke@dtsc.ca.gov]  
**Sent:** Monday, October 06, 2008 10:14 AM  
**To:** Plunkett, Steven, Env. Health  
**Subject:** Crow Canyon Cleaners-Soil Vapor Extraction Pilot Test Work Plan

Good morning, Steven.

DTSC has reviewed the June 9, 2008 Soil Vapor Extraction Pilot Test Work Plan prepared by Terra Vac and received by DTSC on June 27, 2008. DTSC has the following comments to offer.

Comment #1) DTSC recommends the SVE Pilot Test be conducted following the DTSC/RWQCB 2003 Active Soil Gas Investigations Advisory.

Comment #2) DTSC questions whether the proposed lay-out of the SVE and SVM wells is appropriate to obtain a representative assessment of the radius-of-influence of extraction at the site. Typically, multiple SVM wells are installed 90 degrees from one another in a line radiating from the extraction well. DTSC recommends the installation of a SVM in the bathroom of the Montessori School.

Comment #3) The proposed screened zones appear that they will not isolate the different lithologic units beneath the site. Consequently, it will be difficult to determine the contribution provided by the different lithologic units to the total extraction rate and vapor concentrations. DTSC recommends multiple monitoring depths to target the different lithologic units.

Comment #4) More discussion should be devoted to describing the proposed long-term extraction test, i.e., how it will be conducted, how will the data be analyzed, and what will be the logic for concluding the pilot test. What is meant by conducting the long-term test until "diminishing returns of extracted PCE are observed"? Will pulsing of the extraction test occur during the long-term test?

Comment #5) DTSC does not recommend the use of Tedlar bags for soil vapor sampling of VOCs.

Comment #6) What will the PID be calibrated to?

Comment #7) Water vapor may be a factor that will need to be considered if the pilot test will be conducted during the rainy season.

Comment #7) What are the proposed flow rates for the pilot test? DTSC recommends purge and sample rates between 100 to 200 ml/min. What are the proposed purge volumes for the vapor monitoring? DTSC recommends purging the wells at 1, 3, and 7 volumes.

Comment #8) DTSC recommends performing leak tests on each SVE and SVM during the pilot test following the 2003 DTSC/RWQCB Advisory.

If you have any questions, please contact me.

Bud

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