



Department of Toxic Substances Control

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January 15, 2008

Mr. Ray Zimny
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REVIEW OF FINAL LANDFILL 26 SOIL GAS FEASIBILITY STUDY (FS) REPORT,
FORMER HAMILTON ARMY AIRFIELD, NOVATO CALIFORNIA DATED
OCTOBER 2007

Dear Mr. Zimny:

The Department of Toxic Substances has reviewed the subject document, and finds it acceptable, with the following conditions noted below. Outstanding issues related to adequacy of potential impacts to ecological receptors should be addressed prior to the completion of the decision document.

1. DTSC understands that the Army will work with us to address the upgrading of soil gas probes and associated monitoring program. Please schedule a meeting for the BRAC Cleanup Team to discuss this issue.
2. The Army's response to comments in the FS indicates that overall risks across media will be documented in the forthcoming Proposed Plan (PP) and Record of Decision (ROD). Typically DTSC requires that cumulative total risk across all media be reported, so please ensure that the PP and ROD documents overall risks across media.
3. The document states that no threatened or endangered species have been identified at LF26 (a highly disturbed area). The document also argues that the roadway and rip-rap at the margins of the landfill are maintained and the surface cover (grass and brush) is routinely mowed. For these reasons, the Army concludes that the landfill area does not represent significant ecological habitat.

Please address whether a biological survey has been conducted at the site. If so, it should be noted whether animal burrows have been observed at the site. If burrowing animals are present, the Department of Fish and Game (DFG) should also be consulted to determine any necessary future actions. This issue needs to be resolved prior to completion of a decision document.

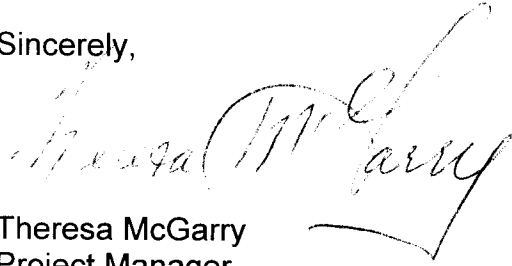
For your reference, DTSC's Human and Ecological Risk Division (HERD) conducted a cursory comparison of soil gas VOC concentrations to ecological inhalation toxicity reference values (TRVs) which have been used for Edwards Air Force Base. While HERD did not conduct a cumulative evaluation, the majority of VOCs for which inhalation TRVs have been estimated were at least two orders of magnitude less than the TRVs. The most notable exception was toluene detected at a maximum concentration of 99.7 ug/m³ (the inhalation TRV is 83.9 ug/m³). Per discussion with M. Anderson of DFG, the toluene inhalation TRV is highly uncertain, and may not be useful for evaluating potential toluene ecological hazards.

4. The Army provided a human health risk assessment as part of the FS using soil gas data for the buffer zone. DTSC believes that the Army's evaluation of soil gas data using generic attenuation factors derived using Johnson and Ettinger (J&E) modeling assumptions may be invalid for the surface of the landfill and buffer zone because the landfill gas may be under pressure. Please note, the J&E model does not take this into account and is not designed to evaluate landfill gas. DTSC's HERD staff did not review the Bay Area Air Quality Management District's (BAAQMD) risk evaluation because they do not have expertise in landfill emissions modeling. Therefore, DTSC would like to work with the Army and the Bay Area Air Quality Management District (BAAQMD) to appropriately evaluate potential outdoor air risks since nearby residents have access to the site. We recommend the Army schedule a meeting with the BAAQMB and DTSC regarding this evaluation. DTSC understands that the uses on the surface of the landfill will be restricted by deed and under a State Land Use Covenant to prevent any indoor air exposures. DTSC also acknowledges that the Army performed a separate human health risk evaluation at the adjacent residential development in which we supported the Army's conclusion that the VOCs posed insignificant risks. In addition, the Army installed a vent trench between landfill and the residential development that intercepts any migration of landfill gases.

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We look forward to our continued work with the Army on Landfill 26. If you have any questions, please feel free to contact me at (916) 255-3664.

Sincerely,



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