



## Department of Toxic Substances Control



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### MEMORANDUM

TO: Gerard Abrams, C.HG.  
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FROM: Laura Rainey, P.G.   
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Geology and Remediation Engineering

DATE: August 12, 2008

SUBJECT: COMMENTS ON THE ENVIRONMENTAL IMPACT STATEMENT DRAFT  
GAP ANALYSIS REPORT, AREA IV, SANTA SUSANA FIELD  
LABORATORY, VENTURA COUNTY, CALIFORNIA

PCA 22120 Site Code 300381-48 MPC 37

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As requested, the Geological Services Unit (GSU) at the Department of Toxic Substances Control (DTSC) reviewed the "*Draft Gap Analysis Report*" (Report) for Administrative Area IV of the Santa Susana Field Laboratory (SSFL). The Draft Gap Analysis Report, dated June 1, 2008, was prepared by CDM for the United States Department of Energy (DOE). The Report presents results of a data gap analysis conducted to determine whether existing data and information for Area IV of SSFL are adequate for the purpose of developing and evaluating risk-based cleanup alternatives in an Environmental Impact Statement. The data gap analysis evaluates chemical and radionuclide data for various environmental media throughout Area IV.

GSU generally concurs with the process for identifying data gaps. There are, however, some concerns. First, some of the screening values used for rural residential Preliminary Remediation Goals (PRGs) may not be in compliance with Senate Bill 990 requirements. Although GSU defers to DTSC's Human and Ecological Risk Division to comment on these PRG values, GSU understands that the appropriate agricultural rural residential PRGs should be more conservative. The use of more conservative, revised agricultural rural residential PRGs as screening values could likely result in identification of more data gaps.

Second, knowledge of historical site process information has largely increased as a result of historical documents recently made available by Boeing. The Data Gap Analysis Report heavily relies on the Historical Site Assessment (HSA; Sapere Consulting, Inc., 2005). The HSA, however, does not incorporate much of the historical site information that has been more recently provided. This recently available historical chemical use and release information is critical for better understanding and defining chemical use areas. It is not clear that the Data Gap Analysis Report utilized this recent information. For example, the Report indicates that 200 documents were reviewed for the data gap analysis. GSU understands that there are tens of thousands of historical documents available for Area IV that describe historical chemical and/or radionuclide usage and releases. Since it is not clear that this information has been fully utilized in the data gap analysis, there is concern that the chemical use areas may not be sufficiently defined. Sufficient definition of chemical use areas is needed in order to determine the data needs as part of the data gap analysis.

Third, a key component of the data gap evaluation process involves identification of constituents of interest (COI). GSU concurs with establishing a COI list, but does not concur with the screening process.

The potential COIs are first listed as all chemicals for which samples were analyzed in soil at Area IV. The list is then reduced by removing chemicals that were analyzed, but not detected. Chemicals that were detected but at concentrations less than the established background values were also removed. Also, chemicals with maximum concentrations less than one-tenth the PRGs were removed from the COI list. In addition, chemicals without available toxicity criteria were removed from the COI list. Chemicals that were infrequently detected were also removed from the COI list. At this time, GSU does not concur with this process of removing chemicals from the COI list. These criteria appear to assume that characterization is sufficiently complete to justify their use. Characterization is not complete, and a significant amount of sampling is ongoing as part of the RFI. Chemicals that have not been detected may be detected in the future. Chemicals that have not been detected at concentrations exceeding their associated background values may be detected at elevated concentrations in the future. Also, certain chemicals having no significant toxicity can be important solvents and/or carriers for chemicals or radionuclides into the environment. Removal of these chemicals from the COI list would effectively limit characterization of releases, particularly to groundwater, associated with non-toxic carriers.

Fourth, a multi-media evaluation should be conducted to ensure that all COIs listed for any specific environmental media are also included as COIs for other environmental media. Comparison of the COI list for soil and groundwater suggests that this multi-

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media evaluation was not conducted. For example, anions are listed as COIs in groundwater (fluoride, nitrate-N, and perchlorate), but are not listed for soil.

Thank you for the opportunity to comment on this document. If you have any questions or require clarification, please feel free to contact me at (714) 484-5434.

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