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MEMORANDUM

TO: Gerard Abrams, C.Hg.
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DATE: July 20, 2008

SUBJECT: COMMENTS ON THE DATA GAP ANALYSIS REPORT AREA IV SANTA
SUSANA FIELD LABORATORY, VENTURA COUNTY, CALIFORNIA

PCA 22120 Site Code 300381-33 MPC 42

BACKGROUND

Aerospace-industry research, *i.e.*, development, manufacture, and testing of spacecraft, propulsion units, and parts, has been conducted by Rocketdyne Propulsion and Power (currently owned by Boeing North American, Inc.) at the Santa Susana Field Laboratory (SSFL) since 1948.

The total area of the SSFL facility, located approximately 5 miles west of Chatsworth, is approximately 2850 acres. The facility has been divided into five administrative areas (Areas I - IV plus a 1200 acre Buffer Zone).

The primary objective of the Area IV SSFL data gap analysis is to identify the data necessary to evaluate a full range of risk-based alternatives in an Environmental Impact Statement that will address the final decommissioning, demolition, and environmental cleanup of Area IV.

Area IV of the SSFL was used by the Department Of Energy for nuclear energy development and liquid metals research and related activities. Although cleanup of portions of Area IV has occurred since the early 1960s, primary cleanup work was begun in 1988 when DOE's nuclear energy research development mission ended. The DOE, in 2003,

issued an Environmental Assessment. The findings of No Significant Impact were challenged in federal court. The court ruled that DOE had failed to comply with the National Environmental Policy Act by not preparing an Environmental Impact Statement. This data gap analysis has been prepared to support Environmental Impact Statement alternative evaluations.

DOCUMENTS REVIEWED

The Human and Ecological Risk Division has reviewed the two volume set "Area IV Santa Susana Field Laboratory Environmental Impact Statement Subject: Draft Gap Analysis Report.". These documents were prepared by CDM, contractors to the United States Department of Energy. An electronic copy of the spreadsheet utilized in calculation of chemical PRGs was also reviewed.

GENERAL COMMENTS (TEXT Volume)

The area addressed by this gap analysis must be clearly defined and consistent throughout the document. There are occasional references to the ETEC area and other references indicate that the entire Area IV is considered.

Although this document purports to address SB 990, by calculating PRGs which it states are consistent with SB 990, it does not. Page 1-11, section 1.6.3, states that the DOE calculated exposure estimate includes fruit and vegetable ingestion. SB 990 implies that an agricultural scenario, which includes several other food pathways, must be addressed and that the most conservative cleanup levels must be utilized.

SPECIFIC COMMENTS (TEXT Volume)

1. Page E-1, The last paragraph states that screening criteria were utilized. The use of screening criteria is not clear. The Human and Ecological Risk Division does not approve the use of screening criteria such as PRGs to eliminate chemicals from the risk assessment. Inorganic chemicals may only be eliminated by comparison with an acceptable background data set which is unimpacted by site activities.
2. Page E-3, Table ES-1 on page E3 reports that the NPDES program assesses surface water in the Area IV. This statement may not be true for surface water bodies that do not discharge through the monitoring points. This point is adequately addressed on page E-7 in the Surface Water section.

3. Page E-6, Last paragraph, the definition of soil vapor is incorrect. Soil vapor concentrations are present in air due to volatilization from soil and groundwater and are not, as is stated, concentrations in soil.
4. Section 3.1.6, page 3-2 reports screening against PRGs, MCLs, and ESLs, but does not indicate the identity of chemicals or samples eliminated using these criteria.
5. Section 3.3.1 refers to a Conceptual Site Model (Figure 3-1) but does not address the subject of which food pathways will be considered in the gap analysis.
6. Section 3.3.1.2, page 3-13, lists specific pathways which will be included in the data gap analysis but does not address the agricultural scenario which would include meat milk and eggs.
7. Section 3.3.1.2, page 3-13, lists specific pathways or offsite receptors but does not address potential chemical exposures during transportation.
8. The Rural Residential Exposure Pathways section, page 3-15, which are complete include edible plant tissue ingestion.
9. Figure 3-1 indicates that ingestion of edible vegetation will be only quantitatively addressed. This does not appear to be consistent with SB 990.

SPECIFIC COMMENTS (Appendix H)

1. Page H-4 refers to an agricultural scenario, however only a rural residential scenario has been addressed. Please correct this misleading statement,

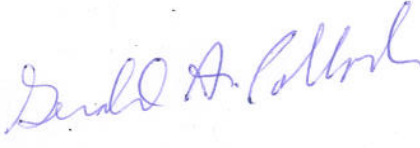
SPECIFIC COMMENTS (PRG Spreadsheet)

1. Please check the name of the congener in cell A650? (2,3,7,8 is not hexa-). However, the "HCDB mix" notation in cell A651 may, but does not, address this discrepancy.
2. Potential double counting of congeners and TCDD TEQ may occur.
3. Pathways and intake parameters that are utilized in PRG calculation are not identified. The text and the CSM don't reference intake parameters, *i.e.* ,fruit and vegetable intake and % of crop that is homegrown.

CONCLUSION AND RECOMMENDATIONS

The Human and Ecological Risk Division recommends that this report be accepted following adequate responses to the general and specific comments (above). The characterization is incomplete and the agricultural scenario, as specified by SB 990, has not been addressed.

The recommendations of the Geological Services Unit and the rural residential scenario, as specified by SB 990, must be addressed prior to final approval. All complete pathways, as specified by SB 990, and all chemicals of potential concern must be included in the risk assessment.

Reviewed by: Gerald Pollock, Ph.D. 
Senior Toxicologist, HERD

cc: