JACOBS ENGINEERING GROUP INC.

M60050.000877
MCAS EL TORO
SSIC # 5090.3

MEMORANDUM

TO: Andy Piszkin - Code 1812.AP **DATE:** 28 June 1993

FROM: John Dolegowski - CH2M HILL/SCO
Yueh Chuang - CH2M HILL/SDO
Chuck Elliott - CH2M HILL/SAC

SUBJECT: **MCAS El Toro Phase I RI/FS**
Contract Task Order (CTO) No. 145
Position Paper on Soil Cutoff Depth
Document Control #CLE-C01-01F145-G2-0156

Purpose

A soil cutoff depth between surface and subsurface soils is required for risk assessment and to support decisions on the Phase II investigation and remediation for the Marine Corps Air Station (MCAS) El Toro Remedial Investigation/Feasibility Study.

Proposal

The Navy proposes a soil cutoff depth of 10 feet. Although site-specific research compiled by MCAS El Toro indicates residential/commercial construction and utilities do not require excavation below a depth of eight feet, the 10-foot depth corresponds to the State's guidance default cutoff depth for the purpose of risk evaluations using a residential scenario (Reynolds et al., 1990; California Department of Toxic Substances Control, 1992).

Implications

During the Data Quality Objectives process, decisions on additional sampling and the potential for remediation will be made for contaminated soils at each stratum/site. Risk-based concentrations, and background levels if appropriate, will be used to make these decisions affecting surface soils. The leaching potential of contaminants, or their potential to impact groundwater, will be the primary consideration for subsurface soils. VLEACH, an Environmental Protection Agency-approved vadose zone transport model, will be used to model the leaching potential of the contaminants.

References

Reynolds, S. D., P. W. Hadley, and R. M. Sedman. "A Health-Based Approach for Evaluating Soil at Depth Contaminated by Hazardous Waste: Utilizing the AAL Soil Contact Criterion." *Risk Analysis*, Vol. 10, No.4. 1990.

California Department of Toxic Substances Control. Supplemental Guidance for Human Health Multimedia Risk Assessments of Hazardous Waste Sites and Permitted Facilities. Prepared by the Office of the Science Advisor. July 1992.

mm/100205C8.SCO\93\JD

cc: H. Nezafati/CH2M HILL
M. Bitner/CH2M HILL
J. Martinson/CH2M HILL
D. Richards/CH2M HILL
File - PMO
File - CTO Notebook/PMO
File - CH2M HILL