

Hornecker, Lynn M CIV BRAC Dept, (EFDSW)

From: Frank Cheng [FCheng@dtsc.ca.gov]
Sent: Tuesday, September 06, 2005 10:43 AM
To: Hornecker, Lynn M CIV BRAC Dept, (EFDSW)
Subject: TAA 769



TAA 769 risk
calcs.del_1.xls



TAA 769-RTC -
fnl_1.doc

Hi Lynn,

DTSC has reviewed the responses and has the following comments.

Frank Cheng, P.E.
Office of Military Facilities
Department of Toxic Substances
5796 Corporate Avenue
Cypress, California 90630
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Alan C. Lloyd, Ph.D.
Agency Secretary
Cal/EPA



Department of Toxic Substances Control

8800 Cal Center Drive
Sacramento, California 95826-3200



Arnold Schwarzenegger
Governor

MEMORANDUM

TO: Frank Cheng, Project Manager
Site Mitigation Branch, Base Closure Unit
Department of Toxic Substances Control
5796 Corporate Avenue
Cypress, California 90630

FROM: Riz A. Sarmiento, Ph.D.
Staff Toxicologist
Human and Ecological Risk Division

DATE: August 15, 2005

SUBJECT: Responses to DTSC Comments
Former Temporary Accumulation Area (TAA) 769
Marine Corps Air Station, El Toro, California

PCA: 18040 Site: 400055-18

BACKGROUND

Document Reviewed: The Human and Ecological Risk Division (HERD) reviewed the responses to comments provided by HERD to Tayseer Mahmoud, Senior Hazardous Engineer, DTSC pertaining to the Closure Report for the Former TAA 769. The comments from HERD were provided on October 20, 2004. The Navy subsequently responded to comments by including an evaluation of the construction worker scenario.

Scope of Review: HERD reviewed the tabulated responses to comments and the attachments reflecting the revisions. The purpose of the review is to determine whether HERD's specific comments 1 through 5 on the Closure Report for TAA 769 were addressed adequately and incorporated into the revised Closure Report.

Background: The Closure Report for TAA 769 was submitted by Shaw Environmental, Inc. on June 4, 2003. On October 20, 2004, HERD commented on specific elements in the human health risk assessment that were to be addressed before the risk assessment would be deemed acceptable. These comments consisted of the following:

- Inclusion of the construction worker scenario in the human health risk assessment,

- Inclusion of beryllium in the evaluation of carcinogens,
- Evaluation of lead using the LEAD SPREADSHEET (DTSC), and
- Incorporation of these revisions into associated discussions in the report.

DISCUSSION AND CONCLUSIONS

HERD reviewed the responses to comments on the Closure Report for TAA 769, prepared on June 4, 2003. The revised risk evaluation addressed HERD's comments by including beryllium in the evaluation of carcinogens, and by evaluating lead separately from the noncarcinogenic COPCs. The construction worker scenario was also evaluated, and the cumulative risk and hazard index estimates for the construction scenario were 4 E-07 and 0.4, respectively. However, these results were based on the assumption that the dust emissions during construction was equivalent to 1/20th, rather than 1/10th, of the permissible exposure limit (PEL) of 10,000 ug/m³ established by the California - Occupational Safety and Health Administration (Cal-OSHA). As a matter of practice, HERD recommends that the dust concentration under the construction scenario be considered equivalent to 1/10th of the Cal-OSHA PEL. In the interest of time, HERD is providing a spreadsheet showing the calculated risk estimates based on a dust concentration equivalent to 1/10th of the Cal-OSHA PEL. Since the inhalation pathway is not the primary contributor to the cumulative cancer risk estimates, and lead was eliminated from the cancer risk estimates, the attached calculations show that the cumulative cancer risk estimate actually decreased to 3E-07. The discussion on the assumed air concentration (last paragraph of Section 5.1.1) should be revised to state that the construction evaluation assumed a dust concentration equivalent to 1/10th of the PEL. The discussion on the "Risk Characterization for Construction Worker" (page 4 of the revised Section 5) should also reflect the revised predicted cancer risk of 3E-07.

HERD does not recommend that the background be subtracted from the cumulative cancer risk and hazard index estimates. Therefore, Section 5.3 should discuss the results in terms of the cancer risk and hazard estimates due to Site COPCs versus the risk and hazard index estimates attributable to background or ambient levels. The Closure Report for TAA 769 will be acceptable after replacement pages with the above-mentioned revisions are submitted.

If you have any questions or concerns, please contact me at (818)551-2983.

Reviewed by: Michael J. Wade, Ph.D., DABT
Senior Toxicologist, HERD
Human and Ecological Risk Division

