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TREASURE ISLAND
SSIC NO. 5090.3.A



Arnold Schwarzenegger
Governor

MEMORANDUM

TO: David Rist, Project Manager
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FROM: James M. Polisini, Ph.D.
Staff Toxicologist
Human and Ecological Risk Division (HERD)

DATE: May 9, 2005

SUBJECT: RESPONSE TO COMMENTS ON REVISED DRAFT CLIPPER
COVE (IR SITE 27) FEASIBILITY STUDY
[PCA 18040, SITE 201209-18 H:8]

BACKGROUND

HERD reviewed the Response to Comments (RTC) on the document titled *Revised Draft Feasibility Study Site 27, Clipper Cove Skeet Range, Naval Station Treasure Island, Treasure Island, San Francisco, California*, dated December 10, 2004. The original document was prepared by SulTech of San Diego, California. SulTech is a joint venture of Sullivan Consulting Group and Tetra Tech EM, Inc. The RTC addresses comments made in a HERD memorandum dated January 7, 2005.

HERD also previously reviewed the Draft Installation Restoration (IR) Site 27 Feasibility Study in a HERD memorandum dated March 18, 2004. HERD also previously reviewed the Draft, Draft Final and Final Remedial Investigation (RI) Reports for Clipper Cove and participated in numerous technical meetings and telephone conversations regarding Clipper Cove over the last 5 years.

Naval Station Treasure Island is in San Francisco Bay between the cities of Oakland, California and San Francisco, California. Naval Station Treasure Island consists of two contiguous islands, Treasure Island (TI) and Yerba Buena Island (YBI). YBI is a natural island in San Francisco Bay, while TI was constructed by placement of sediments on the former Yerba Buena Shoals by

hydraulic dredging during the period of 1936 and 1937. The U.S. Army occupied YBI from 1866 to 1896. TI was leased to the Navy in 1941 and Navy operations continued until 1997. The City of San Francisco currently coordinates the reuse of the property.

Clipper Cove is situated directly between TI and YBI. A portion of Clipper Cove was used as a naval skeet range between approximately 1979 and 1989. Lead, both in sediment and as lead shot, and polycyclic aromatic hydrocarbons (PAHs) from clay targets are the Contaminants of Potential Ecological Concern (COPECs) identified in the Remedial Investigation (RI).

GENERAL COMMENTS

One significant error in the Response to Comments (RTC) must be corrected. Redefinition of Alternative 3 from removal to a No Observable Adverse Effect Level (NOAEL) for lead shot to removal of all lead shot may make implementation of Alternative 3 operationally difficult and cost prohibitive.

SPECIFIC COMMENTS

1. HERD Specific Comment Number 3: The response includes a restatement of the original HERD comment. Unfortunately, the restatement includes a typographic error which could have a significant impact on the evaluation of ecological hazard. HERD referenced a management concentration developed for the protection of fish of 1,000 µg/kg :

“The National Oceanic and Atmospheric Administration (NOAA) has proposed a management concentration of 1,000 µg/kg (Johnson, 2000) for managing the potential ecological hazard to fish associated with polycyclic aromatic hydrocarbons (PAHs) in sediments. While, the binding of PAHs in skeet targets to the dolomite limestone used in the manufacturing process may limit the release (Section 1.4.3, page 9) and therefore the toxicity of the PAHs in skeet targets, this screening criteria should be included with other screening criteria (Table 1).”

The RTC misstates the management concentration as 7,000 µg/kg and indicates ‘the above mentioned screening criterion for fish will be included...’. Please correct the restatement of the HERD comment and include the management concentration of 1,000 µg/kg Polycyclic Aromatic Hydrocarbons (PAHs) for evaluation of potential fish impacts.

2. HERD Specific Comment number 6: The response indicates that a No Observable Adverse Effect Level (NOAEL) for adverse effects of lead shot on diving waterfowl is no longer required as the Navy has revised Alternative 3 (Removal of sediment contaminated lead shot). Alternative 3 is now ‘removal

of all lead shot within the site boundary'. This definition of Alternative 3 increases the amount of sediment, and therefore the cost, above that which would be defined by an agreed-upon lead shot NOAEL. This comment is meant for the DTSC Project Manager and no response is required from the Navy or Navy contractors.

3. HERD Specific Comment number 7: HERD referred to 'future land owners or property lease holders'. The response to comments contains a typographic error referring to 'properly lease holders'. Please correct this typographic error.

CONCLUSIONS

The critical risk assessment issue in the Response to Comments is the correct statement and implementation of the National Oceanic and Atmospheric Administration (NOAA) management concentration of 1,000 µg/kg PAHs for fish effects.

The critical risk management issue raised is that a 'removal of all lead shot' criterion may make Alternative 3 operationally difficult and fiscally prohibitive.

REFERENCE

Johnson, Lyndal. 2000. An analysis in support of sediment quality thresholds for polycyclic aromatic hydrocarbons (PAHs) to protect estuarine fish. National Oceanic and Atmospheric Administration, Environmental Conservation Division, Northwest Fisheries Science Center (NOAA/NMFS), 2725 Montlake Blvd E., Seattle, WA 98112.

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