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TREASURE ISLAND
SSIC NO. 5090.3.A

MEMORANDUM

TO: David Rist, Office of Military Facilities (OMF)
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FROM: James M. Polisini, Ph.D
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DATE: June 9, 2006

SUBJECT: QUALITATIVE HABITAT EVALUATION FOR TREASURE ISLAND AND YERBA BUENA ISLAND AT NAVAL STATION TREASURE ISLAND [SITE 201210-18 PCA 18040 H:10]

BACKGROUND

HERD reviewed the document titled *Comparison of Habitat on Treasure Island (TI) and Yerba Buena Island (YBI)* and an associated Figure 1. This material was submitted as an attachment to an electronic mail message from Cindi Rose of Tetra Tech EM, Inc. of San Francisco, California received on May 22, 2006. The files transferred for HERD review were a Microsoft Word file with the filename *Comparison of Habitat on TI from NAVY.doc* and an Adobe file with the filename *Fig 1 distiller.pdf*. This review is in response to your verbal request on May 22, 2006.

HERD recently entered into discussions with the Navy to formalize the informal discussions and conclusions, among representatives of HERD, the U.S. EPA Region 9 and the U.S. Navy, regarding the necessity for a terrestrial Ecological Risk Assessment (ERA) for the Treasure Island (TI) portion of Naval Station Treasure Island (NAVSTATI). HERD participated in a meeting at NAVSTATI, on September 21, 2005, to clarify the original discussion, referenced as having occurred on June 3, 1994. Dr. James Polisini was the member of HERD who participated in the June 3, 1994 site visit along with Dr. Clarence Callahan of the U.S. EPA Region 9. Prior to the September 21, 2005 meeting HERD contacted Dr. Clarence Callahan, currently of the State of Hawaii Department of

Health. The intent of the comments made by HERD and U.S. EPA Region 9 after the 1994 site visit to NAVSTATI, as recently confirmed with Dr. Callahan, was that an extensive ERA need not be prepared for the more mobile terrestrial receptors (i.e., more mobile mammals and birds) which would preferentially utilize habitats at Yerba Buena Island rather than the 'developed' areas of Treasure Island.

Vertebrate toxicity values and bioaccumulation factors were reviewed in a previous HERD memorandum. The habitat survey summarized in this document is an additional component necessary for the evaluation of potential ecological hazard for terrestrial receptors at Naval Station Treasure Island (NAVSTATI).

Naval Station Treasure Island (NAVSTA TI) is situated midway between San Francisco and Oakland, California and consists of two contiguous islands. Yerba Buena Island (YBI) is a natural island. Treasure Island (TI) is an island constructed of dredged fill on top of a sand shoal extending from the northwest point of YBI. Treasure Island is approximately 403 acres. Clipper Cove is located between YBI and TI.

GENERAL COMMENTS

The material submitted fulfills the majority of the discussion regarding qualitative presentation of the relative differences in habitat between TI and YBI. HERD has only minor comments.

SPECIFIC COMMENTS

1. The habitat surveys conduction on NAVSTATI were made on Navy property, but did not include the Coast Guard property due to lack of access (First Paragraph, page 1). The percent of YBI occupied by the Coast Guard and a general description of the habitat (e.g., mainly buildings, pavement and landscaped vegetation) should be included in the general description.

2. The six plant species described as 'native to the San Francisco Bay Area' (Vegetation, page 1) are not restricted solely to the San Francisco Bay Area. This descriptor should be amended to read 'native to California and the San Francisco Bay Area'.

3. Please describe how the estimate of 80 percent plant cover for YBI was developed (Vegetation, page 2, First paragraph following site description) (e.g., visual estimate from aerial photographs).

4. The listing of native plant populations on YBI (Vegetation, page 2, Second paragraph) appears to reflect information gathered in the 1996 habitat survey. Please indicate in the text the source of this listing of YBI native plant populations.

5. Some estimate of the observation time during which vertebrate species were, or were not, observed at each NAVSTATI site (Wildlife, page 3, bulleted items) should be

included. This could be as simple as a general statement of the total time spent at each site (not including the transit time between sites) or a breakdown of the time spent observing each site.

6. The last sentence (Wildlife, Page 3) regarding burrowing mammals should end with the phrase 'during the time spent at each site'. Burrowing mammals are, no doubt, present on YBI and TI.

7. The summary figure (Figure 1) presents a great deal of site information in a generally understandable form. However, while this is a terrestrial summary, the proximity to San Francisco Bay should also be indicated. This can be accomplished with a shaded circle or square indicating that the site boundary is adjacent to San Francisco Bay or not adjacent to San Francisco Bay.

8. The term 'pest' is a conclusion based on the stated Department of Pesticide Registration criteria. The final sentence (Exposure Pathway Evaluation, page 4, fourth paragraph) should be amended to read 'Except for common urban species, birds were not observed in large groups on TI.'

9. The California Environmental Protection Agency department responsible for regulation of pesticides, cited for the definition of pest species, is the California Department of Pesticide Regulation. Please amend the department name in the Reference Section.

CONCLUSIONS

Given the concurrence of Ms. Sonce deVries, the regulatory representative who attended the March, 2006 habitat survey, the material supplied provides comparison of habitat sufficient to conclude that mobile vertebrate species would utilize YBI habitats preferentially over TI habitat at Sites 6, 12, 21, 24, 30, 31, 32 and 33.

However, a screen for potential adverse effects of soil contaminants on the soil invertebrate community and terrestrial plants at these TI sites should still be performed along with a presentation of the detected soil concentrations.

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