



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

April 14, 2005

Mr. Jerry Dunaway
Southwest Division,
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92101-8517

RE: Draft Munitions Response Action Work Plan, Western Magazine Area, Former Mare Island Naval Shipyard, Vallejo, CA, February 2005

Dear Mr. Dunaway:

EPA has reviewed your draft Munitions Response Action Workplan for the Western Magazine Area on Mare Island. We have the following comments:

GENERAL COMMENTS

1. The Quality Assurance/Quality Control (QA/QC) procedures provided in the Work Plan are presented in Section 11 Quality Control. This section also references the Final Construction Quality Control Plan (WESTON, 2003b) and states that it, "... establishes the measures required to verify the quality of work performed and compliance with approved plans and specifications." While a significant amount of information concerning the QA/QC process is provided by these narratives and the checklists provided in Appendix D Quality Control Checklists, some of the details of the QA/QC process appear to be missing. For example, the pass/fail criteria for the QA/QC evaluation of the intrusive investigation of a grid/transect is not provided in Section 11, nor is any reference made to related documents which contain this information.

Please expand Section 11 of the Work Plan to include the following:

- The details of the grid/transect QA/QC process, to include the sampling process, the percentage of grids/transects that will be sampled, the sample size to be taken in the selected grids/transects, the pass/fail (acceptance) criteria for a grid/transect, and the required corrective measures for a grid/transect which fails.
- A description of the actions to be taken if MEC or a MEC-like item (an object geophysically or physically similar to those used to simulate MEC during the "Initial equipment calibration 'prove-out' surveys..." is discovered during the QA/QC of a

grid/transect.

- A description of any changes to the QA/QC process (increased sampled grids/transects percentage or increased area of sampled grids/transects reinvestigated) proposed as a result of QA/QC grid/transect failures.

2. In Section 11.7 Specific QA/QC Measures, the Work Plan mentions that, "Initial equipment calibration 'prove-out' surveys will be performed prior to the start of survey activities. Inert munitions items representative of those recovered at Mare Island have been planted at a 20 x 20 ft test area adjacent to Dredge Pond 7 at depths that will demonstrate the detection capability of the EM-61 and G-858 survey systems. An additional test area will similarly be established under one of the magazines at the site to evaluate the effectiveness of the GeoVizor system to be used for the magazine footprint surveys." No reference is made here or elsewhere in the Work Plan to a formal prove-out plan for the instruments to be used or the layout of the two mentioned prove-out sites, to include the quantity, types, locations and depths of the planted munitions simulants. As the geophysical prove-out of the instruments to be used is key to the success of the detection of any MEC items remaining in the areas being investigated, it would seem prudent for the contractor to have a formally approved prove-out plan prior to the initiation of any geophysical investigation. If such a plan does exist, it should, as a minimum, be referenced in the Work Plan, and the results of the prove-out should be provided to the EPA. Preferably, it should be included in the Work Plan at an appropriate location.

Please provide the EPA with a copy of the approved geophysical prove-out plan for the work to be conducted using this Work Plan. When the results of the prove-out have been documented, please provide these results to the EPA.

SPECIFIC COMMENTS

1. **Acronyms and Abbreviations, Page vii:** The acronym "CERCLA" is defined as the "Comprehensive Environmental Response, Compensation, and Liability Act" in 42 USC 103. Please correct this definition in the Acronyms and Abbreviations section. The acronym "DDESB" stands for the "Department of Defense Explosives Safety Board." Please correct this in the Acronyms and Abbreviations section, in Section 15 References, and at any other occurrence of the term in the Work Plan. Also, the acronym "ESQD" represents the term "Explosives Safety Quantity-Distance" as per Naval Sea Systems Command OP 5 Volume 1 Ammunition and Explosives Safety Ashore Regulations for Handling, Storing, Production, Renovation and Shipping (NAVSEA, 2002). Please make this correction in the Acronyms and Abbreviations section.
2. **Section 1.1 Purpose, Page 1-2:** The term "MPPEH" is defined in the first paragraph of this section as, "...materials potentially presenting an explosives hazard..." The correct definition of this term may be found in DDESB Technical Paper 18 Minimum Qualifications for Unexploded Ordnance (UXO) Technicians and Personnel. It reads, "material potentially presenting an explosive hazard." The correct definition may also be found on pages vi and 14-1 of this Work Plan. Please correct this definition in Section 1.1.

3. **Section 1.2 Scope, Page 1-3:** The first paragraph of this section cites "...Chapter 12 of Department of Defense Standard 6055.9 (DOD, 1999)." The correct citation of this document should read, "Department of Defense Standard DOD 6055.9-STD ." In addition, the current version is dated October 5, 2004. Please correct this citation, and also correct the date of publication of the standard in Section 15 References. .
4. **Section 13.2.1 UXO Technicians, Page 13-2:** The first paragraph of this section refers to, "...U.S. Army Corps of Engineers Data Item Description OT-025, *Personnel/Work Standards* and..." The correct number for the listed Data Item Description is OE-025. Please correct this citation.

Thank you for the opportunity to review this report. If you have any questions, please call me at (415) 972-3150.

Sincerely,


Carolyn d'Almeida
Remedial Project Manager

cc: Gary Riley, RWQCB
Chip Gribble, DTSC
Henry Chui, DTSC