



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
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MCAS EL TORO
SSIC #5090.3

May 3, 2001

Mr. Dean Gould
Base Realignment and Closure
Environmental Coordinator
Southwest Division
Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

Re: Comments on EOD Range Evaluation Workplan and the UXO Surface Sweep Work Package for Site 1, Marine Corps Air Station, El Toro, April, 2001

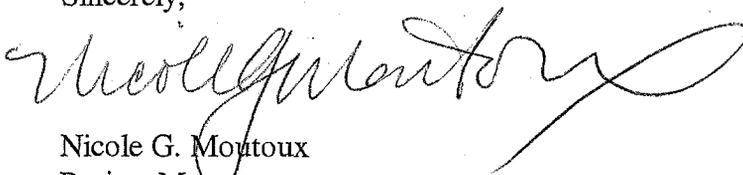
Dear Mr. Gould:

EPA has reviewed the above-referenced workplans and has one over-arching comment regarding the use of emergency removal actions to address unstable UXO as well as several technical comments on procedures. The general comment is discussed below, while the technical comments are attached.

As the State of California has indicated to the Navy in their comments, EPA also has some concerns with the Navy's determination that the unstable UXO at Site 1 should be handled as an emergency removal action. Any UXO subject to the proposed emergency removal action has remained at the site for at least two years without incident since closure of the base in July, 1999 and access to the site is restricted to the public. Therefore, it would seem that the Navy has time to review options for dealing with the UXO as well as provide for public notification and input prior to conducting the action. Given that it has been two years since any activity has occurred at Site 1, EPA is concerned that conducting blows in place (BIP) to handle the UXO without involving the public beforehand, as the Navy proposes, would alarm the surrounding community.

We look forward to the opportunity to discuss these issues with the BCT. If you have any questions, please call me at (415) 744-2366.

Sincerely,

A handwritten signature in cursive script, appearing to read "Nicole G. Moutoux".

Nicole G. Moutoux
Project Manager
Federal Facilities Cleanup Branch

Enclosure

cc: Triss Chesney, DTSC
John Broderick, RWQCB
Greg Hurley, Community Co-Chair
Ms. Polin Modanlou, MCAS El Toro LRA

**REVIEW OF THE DRAFT WORK PLAN
ORDNANCE AND EXPLOSIVES RANGE EVALUATION
IRP SITE 1, EXPLOSIVE ORDNANCE DISPOSAL RANGE**

GENERAL COMMENT

Some of the definitions found in the section entitled "Key R3M Definitions" (i.e., Range, UXO) do not match those found in the Military Munitions Rule (40 CFR Part 260, et al) or those found in the R3M. It is essential that documents pertaining to OE cleanup activities use the same definitions of terms, and it would be helpful if the source of each definition were identified. While some definitions may occasionally need to be condensed or expanded, this may be done by a note at the end of the basic definition or by footnoting any added words and placing them at the end of the glossary or the bottom of the page. Also, definitions which are site-specific to the MCAS El Toro; which are used in a specific document or series of documents; or which are technical terms that are extracted from the appropriate technical literature may be used, but they should have consistent wording when transcribed from document to document.

Please revise the section entitled "Key R3M Definitions" to include only definitions that can be referenced to official Federal Government, Environmental Protection Agency (EPA), Department of Defense (DoD), Department of the Navy (DoN), or other pertinent or subordinate organizations' documents as their source. An exception may be made if the definitions are site-specific to the MCAS El Toro are only used in a specific document or series of documents, are short explanations of acronyms, or are technical terms that are extracted from the appropriate technical literature and are identified as such. If established definitions are expanded or modified, please indicate this by a note at the end of the basic definition or by footnoting any added words and placing them at the end of the section or at the bottom of the page.

SPECIFIC COMMENTS

1. **Section 3.2.1, Problem Statement, Page 3-3:** This section seems to indicate that all of the activities conducted at the EOD Range were training of some nature. Please revise the referenced section to clarify whether or not the EOD Range was used exclusively for training and not for destruction of ordnance recovered during incident response.
2. **Section 3.2.4.2, Spatial (Sectors), Page 3-5, sub paragraphs "Northern EOD Range" and "Southern EOD Range":** The statement is made here that "anomalies greater than 50 millivolts (mV)" were noted, but the instrument used is not specified, nor is the logic behind the 50 mV discriminator selection explained. (This number is also used in Section 4.4.3 "Intrusive Investigation of Subsurface OE," subsection "Impact Area," Page 4-9.) Please expand this section to discuss the instrument used in the previous study and the logic behind the selection of 50 mV as the anomaly investigation selection discriminator.
3. **Section 3.2.7, Sampling Design, Page 3-7:** This portion of the plan refers to the use of the UXO Calculator program to calculate the percentage of each sector to be sampled. UXO Calculator requires that a determination of sector homogeneity be made or assumed. No discussion for the

methodology of the homogeneity determination is provided in the section, which raises a concern as to the reliability of the use of the OXO Calculator program. The identification of a nonhomogeneous sector as homogeneous will seriously affect the validity of all further analyses done by UXO Calculator, since the homogeneity assumption is the basis for the estimation procedures used by UXO Calculator. Please expand the section of this plan entitled "Sampling Design" to better define the sampling process, including the identity of the method used for determination of sector homogeneity.

4. Figure 3-1, Investigation Approach, Page 3-9: It appears that some of the one acre grids containing anomalies that appear to be significant are not being intrusively investigated. This is based upon the assumption that the dashed lines shown on the referenced figure identify grids that are not to be investigated. If this assumption is incorrect, please identify the purpose of the dashed lines. In either case, please indicate the purpose of the dashed grid lines in the explanation section of the chart. Also, please explain in detail the rationale for selection/non-selection of the grids depicted on the figure.

5. Section 4.4.1, Surface Surveys, second paragraph, third sentence, Page 4-4: This sentence indicates that an "all-metals detector" will be provided to each person on the sweep line. However, Figure 4-1 on Page 4-5 has a notation that each UXO Tech will be equipped with a Schonstedt Magnetometer, which only detects ferrous metals. Please explain this apparent discrepancy and correct the referenced pages as necessary.

6 Section 4.4.2.3, Equipment, Page 4-7: It is stated here that "Only one geophysical system will be used, a Geonics EM61 High sensitivity metal detector." However, Section 4.4.3 "Intrusive Investigation of Subsurface OE" states that "An anomaly investigation team will identify the anomaly using the same type of device (EM metal detector or magnetometer)", and Section 4.4.3.4 "Equipment" lists "Instrumentation (hand-held EM conductivity meters or magnetometers) used to assess proximity to subsurface anomalies....." These three sections appear to be in conflict and refer to at least three different detection devices being used. Please explain the apparent conflict and revise the three referenced sections as necessary to eliminate the discrepancies and more fully explain the processes.

7 Figure 4-2, Process Flowchart, Page 4-15: It appears that an arrow from the box labeled "Venting/DEMIL" should connect with the apex of the decision diamond labeled "Explosively Contaminated." The arrow connecting the box labeled "Venting/DEMIL" with the box labeled "Certification" should be removed. The portion of the arrow connecting the "NO" end of the decision diamond labeled "Explosively Contaminated" with the box labeled "Certification" should be left in place. Also, the decision diamond labeled "SWDIV Approval" should be placed in the "YES" line from the decision diamond labeled "Safe to Move UXO," with the "YES" line continuing to the box labeled "Move to Onsite Consolidation Location" and the "NO" line from the decision diamond labeled "SWDIV Approval" connecting with the "NO" arrow that is just below the "Safe to Move UXO" decision diamond. These corrections will better reflect the decision process and bring the chart into better compliance with traditional flowcharting protocols.

**Review of the Unexploded Ordnance (UXO)
Surface Sweep Work Package
EOD Range, Site 1**

GENERAL COMMENT

The work package describes the objectives and procedures for conducting an unexploded ordnance (UXO) surface sweep of the worksite located on the Installation Restoration Program (IRP) Site #1 Explosive Ordnance Disposal (EOD) Range at the Marine Corps Air Station (MCAS), El Toro, California. The sweep is being conducted to verify that no surface ordnance remains accessible as a hazard to workers accomplishing the radiological survey of the 10-acre area of concern located within the boundaries of the EOD range. It consists of the Work Plan and the Health and Safety Plan.

SPECIFIC COMMENTS

1. References, Page WP-vi, reference number 3: DoD 4145.26-M is not an instruction. It is a manual and should be referred to as DoD 4145.26-M. Please correct this citation in the References section and in Section 7.3 "Explosives Safety", found on page WP-16.

2. Section 5.1, Vegetation Removal, Page WP-11: This section provides a general discussion of vegetation removal, but it does not provide any specifics or refer the reader to any instructions located elsewhere in the work package that detail the vegetation removal process. Of particular concern is the absence of any statement requiring the presence of UXO qualified personnel as part of the vegetation removal team.

A search of the work package located a reference to "Clearing and Grubbing" on page HASP-25 in Section 9 "Activity Hazard Analysis" of the Health and Safety Plan (HASP), which is Part 2 of the work package. Again, no statement confirming the requirement for UXO qualified personnel as part of the vegetation removal team was found. Also, this section refers the reader to Section 35 of Reference 4, which is the Weston Injury and Illness Prevention Program. This reference was not available to the reviewer, so no determination could be made as to whether there is a documented requirement in this document for UXO qualified personnel to be present during vegetation removal.

Please provide a definitive statement in Section 5.1 of the Work Plan or in Section 9 of the HASP, or in both documents, stating that UXO qualified personnel must be present when vegetation removal is conducted in areas where UXO may be present.

3. Section 5.4.1, Live Ordnance, Page WP-13, second paragraph: This section states that "Live ordnance that is not considered to pose an immediate threat to human health or the environment will be left in place. An appropriately sized and clearly marked 'buffer zone' to prevent inadvertent contact (and possible actuation of the item) by radiological survey workers will be established around the item." No description of how the zone will be marked is provided in this section or in the HASP. Please expand Section 5.4.1 of the Work Plan to describe the details of the marking protocol for live ordnance buffer zones, or include this information in an appropriate section

of the HASP.

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4. Section 7.2, Training, and Section 8, Project Staffing, Page WP-16: There is a discrepancy between the qualifications for UXO personnel described in Section 7.2 and Section 8. The U. S. Army Bomb Disposal School is omitted as a qualifying school from Section 7.2, but it is included in all three bullets in Section 8. Please correct Section 8 of the Work Plan to include the U.S. Bomb Disposal School as a qualifying course of instruction for UXO personnel.

ERRATA

1. Section 2.4, "Previous Site Work," subsection entitled "Perchlorate Verification at Site 1," Page WP-8, third sentence: Please change the word "located" to read "locate".