M67001.AR.002930
MCB CAMP LEJUENE
5090.3a

LETTER AND U S NAVY RESPONSE TO U S EPA REGION IV AND NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES COMMENTS REGARDING DRAFT FOCUSED PRELIMINARY ASSESSMENT/SITE INSPECTION WORK PLAN ADDENDUM CAMP DEVIL DOG MCB CAMP LEJEUNE NC
02/28/2011
CH2M HILL

Response to Comments
Focused Preliminary Assessment / Site Inspection Work Plan Addendum
Camp Devil Dog Construction Area
Marine Corps Base Camp Lejeune, North Carolina

PREPARED FOR:	Charity Rychak, Marine Corps Base Camp Lejeune David Lundquist, Marine Corps Base Camp Lejeune Bryan Beck, NAVFAC Mid-Atlantic Dave Cleland, NAVFAC Mid-Atlantic Gena Townsend, EPA Region 4 Marti Morgan, NCDENR
PREPARED BY:	CH2M HILL
DATE:	February 28, 2011

Introduction

The purpose of this document is to address comments on the Draft Focused Preliminary Assessment/Site Inspection Work Plan Addendum for the Camp Devil Dog Construction Area. No comments were received from Naval Facilities Engineering Command (NAVFAC) Mid-Atlantic or Marine Corps Base Camp Lejeune (MCB CamLej). The North Carolina Department of Environment and Natural Resources (NCDENR) and United States Environmental Protection Agency provided the comments listed below. The responses to comments are provided in bold.

North Carolina Department of Environment and Natural Resources Comments (dated January 31, 2011)

Comments

1. In Section 2.1.2 there are summaries regarding the former ranges located adjacent to the Camp Devil Dog Construction Area and in quite a few of those it states that estimated depth of potential munitions is expected to be shallow, however, construction or grading activities may have buried potential MEC to an unknown depth. Then in Section 2.3, Site Lithology, it states that a maximum munitions penetration depth of 3 feet is assumed based on surficial sand located at the CDCA MRS. Two comments pertaining to these statements follow:

    - The assumed objective of this clearance work is to remove MPPEH from this area where MILCON projects are planned in the near future. Is clearance to a depth of 3 feet adequate for the construction projects planned for this area?

      Preliminary indications of MILCON construction depths are no greater than 3 feet in most locations. The munitions being found at Camp Devil Dog are expected to range from the surface to 3 feet below ground surface

(bgs) based on penetration depth. The munition with the greatest fragmentation distance (MGFD) at Camp Devil Dog is the 81mm mortar. According to United States Corps of Engineer's EM 1110-1-4009, Table 7.3 (23 June 2000), the maximum ordnance penetration of an 81mm mortar round in sand is expected to be 2.7 feet. MARCORSYSCOM and the Department of Defense Explosives Safety Board (DDESB) have approved the Explosives Safety Submission (ESS) with this approach.

- Upon completion of this clearance, possibly MCB CamLej should consider including institutional controls in this area to maintain awareness of possible ordnance being found or unearthed in this area in the future

  Base planning maintains updated GIS layers for the former ranges and has an established process to evaluate areas identified for projects planned within former environmental and ranges sites.

  As with all munitions response sites, it is not possible to provide 100% assurance that all MEC items have been removed. So, MCB CamLej provides "3R" (Recognize, Retreat, Report) orientation to MILCON site workers for this area and provide on-call support from MCB CamLej Explosive Ordnance Disposal (EOD) or qualified UXO contractor for inspection and disposal of suspected MEC that may be unearthed.

2. In Section 5.4, Removal Verification, it states that a UXO QC Specialist (UXOQCS) will inspect at least 10 percent of the intrusively investigated anomaly locations using a Schonstedt GA-52Cx or an EM61-MK2 to determine whether the anomalies have been removed. Why aren't all anomaly locations checked to determine that the anomaly has been removed and no other items remain?

   All anomaly locations will be checked to determine that the anomaly has been removed. Section 5.3.1, Anomaly Reacquisition/Intrusive Investigation, states that following MPPEH removal or MEC demolition, the area will be rechecked to ensure that no item(s) are present beneath the removed item. Section 5.4, Removal Verification, describes the procedure for the QC check that is conducted to ensure that the routine rechecking process is effective and is being correctly implemented.

United States Environmental Protection Agency Comments
(dated February 10, 2011)

Comments

1. The environmental sampling for MCs is not included in this document. The document identifies that the results of the excavation will be recorded and the hole backfilled. It does not identify how or when environmental samples will be collected.

A section will be added to the work plan to describe the MC sampling objectives and approach as discussed in the response to comment 2 below.

2. A representative amount of samples should also be collected from areas where munitions and explosives of concern (MEC) have been identified not just post detonation.

   Where MEC is found to be unsafe to move, the item will be blown in-place and follow-up sampling will be conducted. If the MEC items are safe to move to a controlled detonation area (CDA), samples will be collected from the CDA when the intrusive investigation is complete. In addition to post-detonation sampling, soil samples will be collected from the beneath MPPEH or safe-to-move MEC if there is visual evidence of a release of munitions constituents (e.g., stained soil, explosives residue visible in the soil, etc.).