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MCRD PARRIS ISLAND
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LETTER AND COMMENTS FROM SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL REGARDING REMEDIAL INVESTIGATION WORK PLAN
SAMPLING AND ANALYSIS PLAN FOR UNEXPLODED ORDNANCES MEC 3 THROUGH 8
AND MC 2 THROUGH 8 MCRD PARRIS ISLAND SC

3/16/2012

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL

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March 16, 2012

Commanding Officer
NAVFAC Southeast
ATTN: Mr. Charles Cook, P.E.
PO Box 30
Ajax Street North, Bldg 135
Jacksonville, Florida 32212

and

Commanding General
NREAO
ATTN: Ms. Lisa Donohoe
PO Box 5028
Parris Island, SC 29905

RE: Conditional Approval of
 o RI WP SAP for MEC at UXOs 3-8 D2
 o RI WP SAP for MC at UXOs 2-8 D2
Marine Corp Recruit Depot (MCRD)
Parris Island
SC6 170 022 762

Dear Mr. Cook and Ms. Donohoe:

The Division of Waste Management of the South Carolina Department of Health and Environmental Control (Department) completed the review of the above referenced documents received January 31, 2012. The Department reviewed the documents with respect to applicable sections of the South Carolina Hazardous Waste Management Regulations (SCHWMR). Based on this review the Department approves the documents with conditions. Please see attached engineering and hydrogeology conditions.

The Department's review is based on the information presented by MCRD to date; any information found to be contradictory may require further action. If you have any questions regarding this issue, please contact me at (803) 896-4218.

Sincerely,

A handwritten signature in black ink, appearing to read "Meredith Amick". The signature is written in a cursive style with a long horizontal flourish extending to the right.

Meredith Amick, P.E., Environmental Engineer
Corrective Action Engineering Section
Division of Waste Management

cc:

Lila Llamas, EPA Region 4
Annie Gerry, Hydrogeology
Priscilla Wendt, SCDNR

Russell Berry, EQC Region 8, Beaufort
Peggy Churchill, TtNUS

Engineering Memo
Prepared by Meredith Amick *MA*
Marine Corp Recruit Depot (MCRD)
March 16, 2012

1. Please note the Department reiterates the following statement, "Land Use Controls are required by SCDHEC as a portion of a remedy on all munitions sites. Therefore, no actual munitions site can be given an NFA. As discussed in team meetings, the Department can concur with no further investigation needed but the remedy will have to include Land Use Controls. At a minimum these Land Use Controls should include a process that, with future use (i.e. construction, property transfer, etc), will provide notification that the area was previously used as a range. This notification will also help with proper management of any waste discovered." This will apply to all areas considered to be part of munitions sites (MRAs); however, more detailed LUCs may be applicable to MRSs determined to contain munitions.
2. The Final ESS should be submitted as part of the D2 Expanded SI Work Plan to evaluate the potential need for any RCRA emergency permits for detonation of recovered MEC.
3. This is the Department's first review of the Proposed Background Values to be used at several sites at Parris Island (UXOs 2-8, Site 14, etc), which was submitted as part of the Response to comments on the previous version of the SAPs. The following comments are applicable to the Soil and Sediment Background Data Evaluation. The Department recommends responding to these comments as part of the Expanded SI D2, because the documents are interrelated and so the administrative process can move forward.
 - a. Please provide a map of where the MCRD samples were taken. It is believed that these samples are the ones taken for the Site 3 background, which the Department has already stated are not applicable to other sites at Parris Island.
 - b. Because of the limited data set from MCRD, the Department does not believe it is appropriate for use as a comparison to MCAS background.
 - c. The following statement is made, "Since the two background metals concentration data sets were statistically similar for most of the soil and sediment data, then combining the two separate background soil and sediment data sets into a larger, more robust data set for use in the background soil and sediment concentration calculations at both MCRD Parris Island and MCAS Beaufort is warranted for those target analytes which were determined to be statistically similar." This seems to indicate that MCAS Beaufort should also begin using the combined data set. However, the MCAS background has been approved for use by the Department at MCAS and will not be modified.
 - d. The Department expected to see a comparison of soil types between MCAS Beaufort and MCRD Parris Island. If soil types are similar then the Department believes that the MCAS Beaufort soil and sediment background data set can be

used at MCRD Parris Island as it is being used at MCAS Beaufort. The MCAS data set should not be manipulated.

4. The Department reiterates Comment #4 from the November 17, 2011 Comments to the RI WP D1, "Firing Points not on active ranges should be within MRP Site boundaries. Please make appropriate changes to maps. (i.e. Firing Point C, D, F, and R for UXO 4, Firing Point T for UXO 5, etc.) This is important as they will require at least the minimum Land Use Controls (See Comment #1). This should be addressed on all figures presented in subsequent reports.
5. In subsequent reports, active ranges should be carved out of UXO Site (MRA) boundaries because during remedy selection LUCs cannot be applied to active ranges.
6. Sediment Characterization Report: Please use Best Management Practices on active ranges (as recommended by the Department per the REVA review Amick to Harrington November 25, 2008). Please note the Sediment Characterization Report has been forwarded to SCDHEC Region 8 for further review.
7. The Department does not fully agree with the revised text in Section 11.2. SCDHEC would like to emphasize that the selection of chemicals of concern, cleanup goals, and remedy selection is a site specific decision and should not be automatically set to a cancer risk level greater than or equal to 1×10^{-4} . Per USEPA RAGs, the point of departure for ILCR risk is 1×10^{-6} or an HI below 1, with a risk management decision being necessary by the risk managers when the ILCR is within the 1×10^{-6} to 1×10^{-4} range. Please note, this risk management range must be maintained.
8. A Preliminary Ecological Risk Assessment is provided for UXO2. Once new data is obtained as part of the Expanded SI Work Plan, the risk evaluation should be updated in the Expanded SI Report.

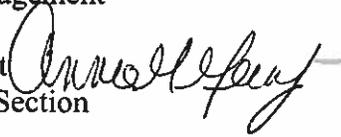


C. Earl Hunter, Commissioner

Promoting and protecting the health of the public and the environment.

MEMORANDUM

TO: Meredith Amick, P.E., Engineering Associate
Corrective Action Engineering Section
Division of Waste Management
Bureau of Land and Waste Management

FROM: Annie M. Gerry, Hydrogeologist 
Federal Facilities Groundwater Section
Division of Waste Management
Bureau of Land and Waste Management

DATE: March 9, 2012

RE: Marine Corps Recruit Depot
SC6 170 022 762

Review of Final-Remedial Investigation Work Plan (RIWP), Munitions Response Program for Unexploded Ordnance Sites 2, 3, 4, 5, 6, 7, and 8 (Parts 1 and 2), Marine Corps Recruit Depot (MCRD), Parris Island, South Carolina dated January 2012

The above referenced document has been reviewed with respect to the conditions of the Federal Facility Agreement (FFA) that the Department entered into with the Navy and EPA Region 4 in January 2005. The Navy has conducted various testing, training, and disposal activities related to military munitions at MCRD. Munitions and explosives of concern (MEC) and munitions constituents (MC) may be present at sites at MCRD Parris Island. The Department of Defense (DoD) is following the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process for the investigation and remediation of these sites. This report is to obtain data under this proposed investigation to establish the nature and extent of contamination associated with historical use of munitions at designated sites at Parris Island.

Based on review of these documents, the following condition was generated.

CONDITION

- 1. Part 2-MC SAP, Page 40-UXO 3-** The text reads, *Samples (soil and groundwater) will be analyzed for metals only. (Specification sheets for the practice bombs used at UXO 3, UXO 7, and UXO 8 do not list any nitroaromatic compounds, so explosives will not be*

analyzed at those sites).” For UXO 7, the text reads, “Samples (soil and groundwater) will be analyzed for metals only”

Even though this was a prior decision agreed upon by the Partnering Team and since then has changed, as per the text (See Pages 108, 110, 111, 114, and Response to EPA’s Comment #42 G), where it specifies that soil and groundwater will be sampled for both metal and explosives, it should be understood that soil and groundwater must be analyzed for metals and explosives even though the worksheets (e.g. Worksheet #18, Worksheet #20) provided in this document do not reflect that.

Should you have any questions regarding this memo, please contact me via email at GerryAM@dhec.sc.gov or by phone at (803) 896-4018.