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MCRD PARRIS ISLAND
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EMAIL OF TRANSMITTAL AND U S EPA REGION IV COMMENTS ON TECHNICAL MEMORANDUM POST-INTERIM CONSTRUCTION AT SITE 3 CAUSEWAY LANDFILL MCRD PARRIS ISLAND SC
7/2/2002
U S EPA REGION IV

Sladic, Mark

From: Pope.Robert@epamail.epa.gov
Sent: Tuesday, July 02, 2002 9:17 AM
To: sanfordaf@efdsouth.navfac.navy.mil; scaturdm@COLUMB34.DHEC.STATE.SC.US; dkeefer@parallaxnet.com; Dewing@CH2M.com; hargrodc@columb34.dhec.state.sc.us; gbenrisk@mindspring.com; Sladic, Mark; wendtp@mrd.dnr.state.sc.us; harringtontj@mcrdpi.usmc.mil; Tom.Dillon@noaa.gov
Subject: Site 3 Sediment Tech Memo Comments

Site 3 Post Interim Constructi...

attached.
(See attached file: Site 3 Post Interim Construction TM EPA Comments.pdf)

Robert H. Pope
USEPA Region 4
61 Forsyth Street
Atlanta, GA 30303
(404)562-8506
pope.robert@epa.gov

July 2, 2002

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4WD-FFB

Brigadier General Joseph J. McMenamin
Commander
Marine Corps Recruiting Depot - Parris Island
P. O. Box 19001
Parris Island, SC 29906-9001

SUBJ: Technical Memorandum Post-Interim Construction Risk Assessment (May 2002)
Site/SWMU 3 - Causeway Landfill
Marine Corps Recruit Depot Parris Island, South Carolina
EPA ID#: SC6170022767

Dear General McMenamin:

The U.S. Environmental Protection Agency (EPA) has received and reviewed the above referenced document. EPA's comments are enclosed. The comments must be completely and satisfactorily addressed before the document can be approved and considered final.

If I can be of assistance in any way or you have questions regarding this issue, please call me at (404)562-8506.

Sincerely,

Robert H. Pope
Federal Facilities Branch
Waste Management Division

cc: Tim Harrington, MCRD
Dave Scaturo, SCDHEC
Don Hargrove, SCDHEC
Art Sanford, NAVFAC

US EPA Comments on the Technical Memorandum Post-Interim Construction Risk

Assessment (May 2002) for Site/SWMU 3 - Causeway Landfill
Marine Corps Recruit Depot Parris Island, South Carolina
EPA ID#: SC6170022767

General Comments:

1. As an overall recommendation for the Parris Island program, the Navy may want to consider developing a reference concentration for PAHs, so that it can be compared to site-specific concentrations. Since PAHs are a potentially widespread contaminant that may not be directly site related, having a reference concentration would be helpful in determining the need for remedial action at sites throughout MCRD-Parris Island.

2. Food chain models should not have been utilized to evaluate contaminants whose primary mode of toxicity is through direct exposure. It is recommended that a methodology such as the mean ERM quotient be used to evaluate all contaminants at this site. This methodology should be helpful in evaluating each sample location to determine its potential for toxicity and could easily be worked into any long-term monitoring program that may be put in place at this or any other sediment monitoring site in the future.

3. The methodology for calculating the background/typical facility sediment concentrations is confusing as presented in the text. If the value included as ½ the background/typical facility concentration is equal to the mean (or average), it should be clarified in the report and reported as such. Typically concentrations are compared to the range of reference concentrations for each contaminant. It is recommended that the reference comparison either be clarified or revised.

4. If contaminants do not exceed the background/typical facility sediment concentrations (e.g., many of the pesticides at Site/SWMU 3), food chain models did not need to be completed for those contaminants. If the team has agreed to these values as a reference concentration to be used in risk assessments, the food chain models (for pesticides) should not be necessary since the sediments collected to support this do not exceed the background/typical facility sediment concentration. As presented, the argument for using site forage factors to reduce the food chain model HQs may not be legitimate since the concentrations associated with the site are similar to those base-wide (as compared to the background/typical sediment concentration).

5. It is requested that a table be developed which shows the maximum and mean concentrations of COCs prior to the Interim Remedial Action in comparison to the maximum and minimum concentrations as of the latest sampling. The table should also show the percent reduction for each contaminant as a result of the IRA and would bolster the recommendations and conclusions section.

6. It would be helpful if the areas discussed in the text (Areas 1,2,3, and 4) were identified on the site figure showing the positive detections of compounds in sediment (Figure 2).

Specific Comments:

1. Page 2, Section 3.0. The word scooped on this page is misspelled and should be corrected.

2. Page 10, Section 5.3. and 5.3.1. It is recommended that an ERM-type and background and reference value screen be used here to reduce contaminants that need to be put through the food chain model. Refer to General Comments 2 and 4.

3. Page 17, Section 6. The numbering system used in Section 6 does not match earlier sections and should be revised.

4. Page 18, Section 6, Part 3.0, Bullet 2, Last Sentence. Clarify if the "other NOAEL HQs" consider mean concentrations and home ranges or if they are unaltered NOAEL HQs.

5. Page 18, Section 6, Part 3.0, Bullet 4, First Sentence. State what pesticide contaminant(s) comprise the majority of the risk for the Heron.

6. Page 18, Section 6, Part 3.0, Bullet 4, Last Sentence. Clarify if the "other NOAEL HQs" consider mean concentrations and home ranges or if they are unaltered NOAEL HQs.

7. Page 18, Section 6, Part 4.0, Last Sentence. This statement leaves the conclusions of the document very open ended. The statement could be interpreted to indicate that additional sediment testing is needed over the long term to confirm the biodegradation of the pesticides in the sediments. It could also be interpreted to indicate that since biodegradation is expected to happen, long term monitoring of the sediment is unnecessary. It is requested that the section be revised to make a concrete recommendation to either implement long term monitoring of sediment or to present a strong, clear and well supported recommendation that sediment monitoring is not needed and no further action is needed at Site 3 in order to be protective of the environment and all ecological receptors.