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TRANSMITTAL EMAIL AND MEMORANDUM REGARDING NATIONAL OCEANIC AND
ATMOSPHERIC ADMINISTRATION COMMENTS ON TECHNICAL MEMORANDUM POST-
CONSTRUCTION RISK ASSESSMENT FOR SITE 3 CAUSEWAY LANDFILL MCRD PARRIS
ISLAND SC
11/7/2002
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Sladic, Mark

From: Tom Dillon [Tom.Dillon@noaa.gov]
Sent: Thursday, November 07, 2002 7:29 AM
To: Art Sanford; David Keefer; Debra Kraemer; Diane Duncan; Don Hargrove; Priscilla Wendt; Rob Pope; Tim Harrington; David Scaturo; Sladic, Mark
Subject: NOAA Comments-Site 3 Post-Construct. Tech.Memo



021107

:cmt-Post-Constr.Ser

see attached

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National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
OFFICE OF RESPONSE & RESTORATION
COASTAL PROTECTION AND RESTORATION DIVISION
c/o U.S. Environmental Protection Agency, Region 4
Waste Management Division
61 Forsyth Street, Atlanta, GA 30303

MEMORANDUM

TO: Parris Island Partnering Team

FROM: Tom Dillon, Ph.D.

SUBJECT: NOAA Comments - Technical Memo Post-Construction Risk Assessment

DATE: November 7, 2002

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA) appreciates the opportunity to comments on Technical Memorandum Post-Interim Construction Risk Assessment for Site/SWMU 3 – Causeway Landfill, Marine Corps Recruit Depot Parris Island, South Carolina, prepared for Southern Division, Naval Facilities Engineering Command by Tetra Tech NUS, Inc., Pittsburgh, May 2002. If you have any questions, please contact me at 404-562-8639; FAX 404-562-8662 or tom.dillon@noaa.gov.

1. Sediment sampling results reported in the subject document indicate residual ecological risks for site COPCs remain following the interim remedial action taken 8/2000-6/2001. This conclusion is reached based on the following.
 - a. Mercury concentrations approximate or exceed EPA Sediment Screening Value (SSV) at 7 locations.
 - b. Arsenic concentrations exceed EPA SSV at 5 locations.
 - c. Copper concentrations exceed EPA SSV at 3 locations.
 - d. Lead concentrations exceed EPA SSV at 3 locations.
 - e. Total PAH concentrations exceed EPA SSV in one sample.
 - e. Inorganic exceedences are most frequently found at sediment area 4, sediment area 2 and marsh-side sediment stations 43 and 44.
 - f. The highest detected concentrations of DDE, DDD and DDT are associated with sediment area 4.

g. Food web modelling results using maximum and mean sediment concentrations and NOAEL and LOAEL TRVs indicate unacceptable risks remain for mink, heron, mummichog and osprey due to DDE, DDD, DDT, arsenic, lead and mercury (see Tables 12 and 13).

h. Choice of sediment sampling gear (a spoon) has introduced significant uncertainty into these sample results (probably biased current risk estimates downward).

i. The lack of sediment grain size and organic carbon data has introduced significant uncertainty into results interpretation (unknown bias). Both EPA and ASTM guidance list sediment grain size and organic carbon analysis as *minimum* parameters when analysing sediments. (EPA 1992. Sediment Classification Methods Compendium, EPA 823-R-92-006; ASTM Standard Guide E 1391 - Collection, Storage, Characterization, and Manipulation of Sediments for Toxicological Testing).

j. The lack of sediment toxicity tests and chemical residues in sediment-associated biota remains a significant uncertainty (unknown risk bias).

2. Based on the above technical results and uncertainties, the NOAA recommend a focused long-term monitoring (LTM) plan be developed to generate information for the five-year review. This plan should establish the spatial and temporal trends in sediment contamination especially in the vicinity of sediment area 4. We are anxious to work cooperatively with all parties to develop this focused LTM plan.

3. Please revise the conclusions and recommendation (§6.0) per the above comments.

4. Other Comments

a. The Figure 2 legend indicates "E" denotes an analytical result that "Exceeds Ecological Criteria". Some values exceed EPA's SSVs but are not designated with an "E". Please recheck and place an "E" beside every analytical result that exceeds EPA's SSV.

b. Report water depth at the sediment sampling locations in §3.0.

c. Paragraph 4.0 of the conclusions and recommendation (§6.0) states "... pesticides concentrations will continue to decline through natural recovery processes (biodegradation)". Delete this sentence as no evidence for continuing biodegradation has been presented. This evidence, however, can be generated during a properly designed LTM plan and will assist decision-making at the five-year review.

d. In Table 4, cite 1991 $\mu\text{g}/\text{kg}$ as the maximum sediment concentration for Total PAH.

e. In Table 11, replace Buchman, 1999 with the appropriate reference to the original citation as was done with all other sediment quality guidelines.