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LETTER REGARDING SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES COMMENTS ON DRAFT REMEDIAL ACTION/CORRECTIVE ACTION WORK PLAN FOR SITE 1 INCINERATOR LANDFILL AND SITE 41 FORMER INCINERATOR MCRD PARRIS ISLAND SC
12/6/2002
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

South Carolina Department of
Natural Resources

Paul A. Sandifer, Ph.D.
Director
John V. Miglarese
Deputy Director for
Marine Resources

December 6, 2002

Commanding General
Marine Corps Recruit Depot
Attn: Timothy J. Harrington, NREAO
P.O. Box 19003
Parris Island, SC 29905-9003

RE: Draft Remedial Action/Corrective Action (RA/CA) Workplan
Site/SWMU 1 – Incinerator Landfill and SWMU 41 – Former Incinerator
MCRD Parris Island
Beaufort County, SC

Dear Mr. Harrington:

The S.C. Department of Natural Resources (SCDNR) has reviewed the Draft Remedial Action/Corrective Action (RA/CA) Workplan for Site/SWMU 1 and for SWMU 41, and offers the following comments:

4.8 Site Reconnaissance Assessment/ Reference Wetland Search

1. Please add a map showing the locations of all transects sampled, including reference sites.

5.9 Salt Water Marsh Restoration

2. 5.9.2, p. 5-15: It is stated that "The revegetation of the restoration area will consist primarily of transplanting cordgrass vegetation from marsh area in the immediate vicinity." The SCDNR opposes transplanting plants from undisturbed natural marsh habitat, and recommends that all plantings consist of healthy, well-established nursery-grown stock. Planting should be conducted during the optimal time frame specified in the Workplan (March 1 – July 1), to improve the likelihood of success. Following excavation, but before planting, sediments should be stabilized with coconut mat or other appropriate, biodegradable material, to minimize erosion and enhance restoration success. This is particularly advisable if planting cannot be conducted immediately after excavation (which may not be completed until late summer, when conditions are not optimal for planting).

3. 5.9.2.1, p. 5-16: It is stated that "...cordgrass will be planted on either 1.5 foot spacing...or on three foot spacing...", depending on whether or not seeding is implemented in addition to the planting. Given the uncertainty of achieving the specified success criteria by relying on the success of seeding, the SCDNR recommends that the denser planting regime (1.5-foot spacing) be implemented. The SCDNR would not object to broadcast seeding in addition to this, to improve the likelihood of success, however.

Section 10.6 Salt Water Marsh Restoration

4. 10.6.3 and 10.6.4, pp. 10-15 and 10-16: (see comment 1. above).

Section 14.5 Salt Water Marsh Restoration Monitoring Plan

5. p. 14-4: It is stated that the criteria for success will include "32 stems per square meter...(average number of stems per square meter as observed in the two reference wetlands)..." Please clarify what constitutes a "stem", since a single plant can have numerous stems. Counts of individual *Spartina alterniflora* stems along four transects at two undisturbed marsh sites (approx. 1.5 m above MLW) in the Charleston Harbor area yielded mean stem densities ranging from 10.2 to 30.8 stems/.04 m^2 (or 255 to 770 stems/m^2).* These values are an order of magnitude higher than those reported in the Workplan, but may simply reflect a different method of counting stems in the field.

Section 14.6 Salt Water Marsh Contingency Plan

6. p. 14-6: The SCDNR recommends rewording the second paragraph as follows: *"Should the Salt Water Marsh Contingency Plan be implemented, coordination with the Navy and approval by the appropriate regulatory agencies will be required."*

Appendix A: Pre-Design Confirmation Sampling and Analysis Plan

7. Appendix 3.1, p. 3-1: It is stated that "Sample COPCs analyzed will be PAHs, copper, and lead." Mercury should also be included in the list of analytes, since an ecological RGO was selected for this metal as well (0.13 mg/kg; see main report text, p. 3-3).

8. Appendix 3.1, p. 3-1: A rapid immunoassay screening test is proposed to be used in the field to screen sediment samples for laboratory analysis of PAHs, and to "aid in a quicker delineation of the extent of impact". The SCDNR has the following concerns about this test that should be addressed: 1) the test is identified by the manufacturer as a "soil" test. Is this test appropriate for salt marsh sediments, and will it produce results comparable to those demonstrated for soils? 2) The selected ecological RGO for PAHs (1674 ppb) is within 1ppm of the screening test's lower detection limit (1 ppm). What is the precision and accuracy of this test, and has it been independently confirmed by anyone other than the manufacturer? 3) The

manufacturer's "Trouble Shooting Guide" suggests that there is ample room for error in executing this test, potentially resulting in a false positive or a false negative. Will the field crew include personnel experienced in the conduct of this test? 4) Exactly how will this test be used to determine the limits of excavation? It appears that there are three possible test results: PAHs present (at no specified concentration), PAHs < 1 ppm, and PAHs < 10 ppm. If this test is intended to be used to determine the extent of excavation necessary to achieve the selected RGO, only those sediments showing a result of <1 ppm PAHs could be excluded from excavation. Is this the intent of the test? Please clarify this and the foregoing issues.

We hope you find these comments helpful. If you have any questions, please contact Priscilla Wendt, the SCDNR project manager for this site, at 843-953-9305.

Sincerely,

Robert E. Duncan
Environmental Programs Director

cc: Mark Sladic, Tetra Tech NUS, Inc.
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Tom Dillon, NOAA
Diane Duncan, USFWS

*Wenner, E., D. Knott, and P. Wendt. 1997. Effects of Pipeline Construction on the Vegetation and Macrofauna of Two South Carolina Salt Marshes. *Wetlands* 17:65-81.