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LETTER AND COMMENTS FROM U S EPA REGION IV REGARDING RESOURCE  
CONSERVATION AND RECOVERY ACT SAMPLING VISIT WORK PLAN FOR SOLID WASTE  
MANAGEMENT UNITS 47, 53 AND 55 NS MAYPORT FL  
7/20/1999  
U S EPA REGION IV

July 20, 1999

4WD-FFB

Ms. Adrienne Wilson  
Southern Division  
Naval Facilities Engineering Command  
P.O. Box 190010  
Charleston, South Carolina 29419-9010

SUBJ.: NAVSTA Mayport, Florida  
EPA ID# FL9 170 024 260

Dear Ms. Wilson:

The United States Environmental Protection Agency (EPA) has received and reviewed the following document:

**RCRA Sampling Visit Work Plan for SWMUs 47, 53 and 55** (Tetra Tech NUS, April 1999).

Enclosed are EPA's review comments based on a general technical review as well as a human health and ecological risk assessment review. If you have any questions, please contact me at (404) 562-8555.

Sincerely,

Craig A. Benedikt  
Remedial Project Manager  
Federal Facilities Branch

Enclosure

cc: Jim Cason, FDEP  
Randy Bishop, NAVSTA Mayport  
Terry Hansen, TtNUS

**EPA Review Comments  
RCRA Sampling Visit Work Plan [RCRA SV WP]  
Solid Waste Management Units 47, 53, and 55  
U.S. Naval Station, Mayport Florida  
dated April 1999**

**SPECIFIC COMMENTS**

1. **Cover Spline, Outside Cover Page and Inside Cover Page.** *The cover spline is titled, Draft RCRA Facility Assessment Sampling Visit Workplan SWMUs 47, 53, and 55, Naval Station, Mayport, Florida. The outside cover page is titled, Resource Conservation and Recovery Act Sampling Visit Workplan for Solid Waste Management Units 47, 53, and 55, Naval Station Mayport, Mayport, Florida. The inside cover page is titled, Resource Conservation and Recovery Act Facility Assessment Sampling Visit Workplan, Solid Waste Management Units 47, 53, and 55, U.S. Naval Station, Mayport, Florida. The cover spline, the outside cover page and the inside cover page should all be consistent and be titled exactly the same. This discrepancy in titles should be addressed.*

**RESPONSE:**

The referenced pages of the report have been corrected to address this comment.

2. **Page 2-2, Third Paragraph.** *The text states, "These sewer lines are all believed to be above the water table, and in general, are approximately 6 feet below land surface (bls)." Since the site is located at the confluence of the St. Johns River and the Atlantic Ocean, it seems that the ground water would most likely be closer to ground surface as opposed to greater than 6 feet. The depth to ground water should be verified prior to beginning field activities and the proposed approach should be modified if necessary.*

**RESPONSE:**

The depth to groundwater will be verified prior to beginning field activities. If an approach modification is warranted it will be discussed with the Mayport Partnering Team prior to implementation.

3. **Page 2-6, Section 2.1.2.2.** *The text states, "Each monitoring point will consist of 1-inch inside diameter (ID) steel or polyvinyl chloride (PVC) pipe with a 5-foot long 0.010-inch slot screen at the bottom. Each point will be installed in a hole, using DPT, to a depth such that the screened interval spans the depth at which the force main is placed, which in general is expected to be approximately 6 feet bls. Therefore, if the line is actually at 6 feet bls, the bottom of the monitoring point would be placed 2.5 feet below it, at a depth*

of 8.5 feet bls. In some cases the bottom of the point may be below the water table, which is acceptable. However, part of the screened interval must be above the water table to permit retrieval of soil gas samples." As stated in Comment 1, if groundwater is less than 6 feet below ground surface (bgs), then the 5 foot screen monitoring point may be totally submerged below the water table and would not allow the retrieval of soil gas samples or yield representative samples. The proposed sampling method is a concern because of the lack of information on depth to groundwater. Due to the potential that ground water at the facility maybe very shallow, there is a good possibility that the proposed approach for assessing the underground pipelines is unfeasible. The depth to groundwater should be verified and, if necessary, a different approach for verifying potential releases should be proposed. The work plan proposes 480 monitoring points; however, this number appears excessive given the level of effort usually associated with this type of investigation. The need for 480 monitoring points should be reevaluated.

**RESPONSE:**

Based upon the results of the data presented in the Group IV Sampling Event report submitted by HLA in March 1999, soil gas testing has been omitted from the Group IV Workplan. The revised workplan proposes the installation of approximately 150 soil borings and 30 monitoring wells, locations to be chosen based on results of historical investigations.

4. **Page 2-15, Third Paragraph.** The text states, "Terraprobe borings are self-healing and do not require grouting upon completion." This statement requires further explanation. The text should provide by what process these boring will "self-heal". The text further states that pumping will continue until the turbidity is below 5 NTUs or until the field operation leader believes further pumping will not significantly decrease the turbidity. According to the Region 4 SOP, pumping should continue until turbidity is below 5 NTUs or until field parameters stabilize (temperature, pH, and conductivity).

**RESPONSE:**

The workplan text on Terraprobe sampling was revised to state: "If necessary, the Terraprobe borings will be grouted upon completion."

The workplan text on groundwater sampling was revised to state: "The temporary sampling point will be pumped until temperature, specific conductance, and pH have stabilized and until the turbidity is below 5 NTUs."

5. **Page 2-16, First Paragraph.** The text states, "Volatile organic compounds (VOCs) will be collected last for samples submitted for laboratory analyses." According to EPA protocol, VOCs should be collected first instead of last. The text should be changed to reflect this procedure. The text further states that VOCs are used to screen samples

*because the presence of inorganic contaminants is not expected without the presence of volatile organic contaminants. This statement should be explained.*

**RESPONSE:**

The text was revised to state: "...VOCs will be collected first for samples submitted to laboratory analysis." The statement regarding VOCs and the presence of inorganic contaminants has been deleted.

The following comments relate to the human health and ecological risk review:

**GENERAL COMMENTS**

6. *According to the Sampling Visit Work Plan (SVWP), surface water and/or sediment from Mayport Turning Basin are not being sampled. It is unclear as to why surface water and sediment are not being sampled from this site. According to the Chapter 2 figures, Mayport Turning Basin is very close to SWMUs 47, 53, and 55 and migration of contaminants via surface water runoff; storm water discharge and groundwater discharge to the Turning Basin seems highly possible. Surface water and sediment contamination may be occurring in Mayport Turning Basin and should therefore be sampled and analyzed during the Sampling Visit. If this is not the case it should be explained why in the SVWP.*

**RESPONSE:**

A similar question was asked on the AOC C workplan for Mayport Florida. The same response is provided here.

Although potential chemical migration from AOC C (and these SWMUs) to the Turning Point Basin will be investigated in this study and addressed in the uncertainties section of the risk assessment portion of the report; surface water and sediment risk assessment is beyond the scope of this ERA. This is primarily because the basin is dredged every 2 to 3 years for safe berthing of Navy ships. Dredged sediments are transferred through a slurry pipeline to SWMU 50, the Western Dredge Spoil area. Data from any surface water or sediment samples that would be collected for this study, and subsequent evaluation of ecological risks, would be unusable the next time the basin is dredged.

7. *Figures 2-1, 2-2, and 2-3 show maps of SWMUs 47, 53, and 55, respectively. The figures show a map of the Naval Station Mayport with dashed lines representing pipelines, sewers, or drainage ditches. However, the figures do not show the direction of flow in these pipelines, sewers, or drainage ditches. Direction of flow of all pipelines, sewers, drainage ditches as well as groundwater flow direction should be marked on each of the appropriate Chapter 2 figures.*

**RESPONSE:**

The flow direction information will be verified prior to the beginning of field activities, and indicated on figures presented in the report of the investigation.

8. *It is stated in Chapter 4 that environmental samples will be compared to a number of benchmark screening values during the preliminary risk screening process. Soil results will be compared to human health benchmarks while surface water and sediment samples will be compared to ecological benchmarks from 1991, 1993, and 1994. It should be noted, however, that more recent ecological screening values (1998) have been released by EPA Region IV. In a December 22, 1998 memo from Ted W. Simon, a toxicologist for the USEPA Region IV Office of Technical Services, new surface soil guidelines for Region IV are introduced. Included in the memo are updated sediment and surface water screening values. These newly issued Region IV ecological screening values should be used in the preliminary risk screening process. The SVWP should be changed to state that these values will be used. In addition, the ecological screening process should follow the guidance presented in this memo for implementing USEPA's 1997 Process for Designing and Conducting Ecological Risk Assessments document. Dr. Simon's memo can be found at: <http://www.epa.gov/region4/wastepgs/oftecser/otsguid.htm>*

**RESPONSE:**

The Work Plan will be modified to indicate that Region IV ecological screening levels presented in the December 22, 1998 memorandum will be used in the ERA.

**SPECIFIC COMMENTS**

9. ***Section 2.1.2.3, Page 2-7.** This section describes the environmental sampling proposed for SWMU 47. The environmental sampling to be performed at this site is direct push technology (DPT) sampling. It is unclear what environmental media will be sampled using this technique. Although a detailed discussion of the DPT system was presented in the original work plan, the system should be better explained in Section 2.1.2.3 of this work plan so it is clear what environmental media will be sampled at SWMU 47.*

**RESPONSE:**

The text was revised to state: "...DPT sampling or equivalent technology will be used to evaluate whether oily waste has been released to the surrounding soil."

10. ***Section 2.2.2.3, Page 2-14.** This section describes the environmental sampling proposed for SWMU 53. According to Figure 2-2, a sanitary sewer line runs along Moale Avenue, which is very close to Lake Wonder Wood. If leaks are found along this sewer line, there is the possibility that contamination could be migrating into Lake Wonder Wood. Therefore, it is recommended that surface water and sediment samples from Lake*

*Wonder Wood be included in the environmental sampling event at SWMU 53.*

**RESPONSE:**

ABB Environmental Services (ABB-ES) sampled Lake Wonderwood sediment and surface water in 1993 (*Sediment and Surface Water Sampling and Analytical Results, Lake Wonderwood Area, U.S. Naval Station, Mayport, Florida*, ABB-ES, December 12, 1996). The results of this investigation warranted no further action, therefore Lake Wonderwood sampling will not be included in the Group IV investigation.

11. **Section 2.2.2.3, Page 2-14.** *It is stated in the last sentence of the first paragraph of Section 2.2.2.3 that soil and groundwater sampling procedures will be those outlined in Appendix C of this work plan. According to the table of contents, there is no Appendix C in this work plan. If sampling procedures are located in an appendix from another document, it should be stated in this sentence. This discrepancy should be corrected as appropriate.*

**RESPONSE:**

Appendix C has been added to the Table of Contents and the appropriate text relocated.