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NS MAYPORT
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LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL
PROTECTION REGARDING SOIL SAMPLING WORK PLAN FOR SOLID WASTE
MANAGEMENT UNITS 2, 3, 4, 5 AND 22 NS MAYPORT FL
11/8/2009
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



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November 5, 2009

Mr. Brian Syme
Department of the Navy
Naval Facilities Engineering Command Southeast
Naval Air Station Jacksonville
135 Ajax Street, Building 903
Post Office Box 30
Jacksonville, Florida 32212-0030

RE: Soil Sampling Work Plan for SWMUs 2 (Landfill B), 3 (Landfill D), 4 (Landfill E), 5 (Landfill F), and 22 (Abrasive Blasting Area), Naval Station Mayport, USEPA ID #FL9 170 024 260, Mayport, Florida (Tetra Tech NUS, August 10, 2007)

Dear Mr. Syme:

I have reviewed the above document which was received on August 13, 2007. This Soil Sampling Work Plan (SSWP) describes the impact that recent regulatory revisions have had on the extent of soil contamination delineation at Solid Waste Management Units (SWMUs) 2, 3, 4, 5, and 22 since the draft Corrective Measures Study (CMS) Report was submitted and outlines supplemental soil sampling requirements at these SWMUs. The objectives of the sampling program detailed in this plan are to completely delineate surface and subsurface soil contamination within and around the SWMUs in excess of the new FDEP Soil Cleanup Target Levels (SCTLs). The resultant data is to be used to clearly define the appropriate land use control (LUC) boundaries at the respective SWMUs. Below are FDEP's comments and observations pertaining to this document and these SWMUs.

- 1. Observation #1:** FDEP, Mr. Jim Cason, P.G., had previously concurred with a SSWP for these SWMUs which is dated April 9, 2007 in a letter dated May 2, 2007. It is unclear to me why this new SSWP for these SWMUs, dated August 10, 2007, was written.
- 2. Observation #2:** SWMUs 2, 3, 4, and 5 are former landfill sites located in the southwestern portion of Naval Station (NS) Mayport that operated from 1960 to 1985. SWMU 22 is a facility that was used for abrasive blasting and is located approximately 400 feet northeast of SWMU 2. Collectively, these SWMUs are referred to as the Landfill Area SWMUs. Trenches at each of the landfill SWMUs intersected the shallow water table and wastes were placed below the groundwater level. Waste material above the water level was burned on a daily basis. The same types of wastes were disposed of at each landfill and were reported to include waste oil, transmission fluid, hydraulic fluid, transformer oil, mercury waste from shipboard and onshore activities, paint waste, asbestos, solvents, plating solutions, pesticide cans, batteries, bilge water, magnaflux dye, penetrants, photo-processing waste, sanitary garbage, and construction rubble.
- 3. Observation #3:** SWMU 22 consists of a prefabricated sheet metal building on a concrete pad located within a fenced area. An abrasive media was used from 1985 until

1992 for cleaning ground support equipment and vehicles. During a visual site inspection conducted in 1989, the blasting residue was observed to have been placed in approximately 100 55-gallon drums.

4. **Observation #4; Page 2:** Groundwater investigation results for these SWMUs are addressed in the draft CMS Report. Regulatory oversight responsibility of the sediments located in the ditches at SWMUs 2, 3, 4, 5, and 22 has been transferred from the Resource Conservation and Recovery Act program to the FDEP stormwater program per an agreement reached at the NS Mayport Partnering Team Meeting in January 2007. Please provide me with a copy of the CMS report mentioned in this report (a CD containing the PDF version of the CMS report will be fine). It is difficult to believe the groundwater had no contaminant exceedances after these practices had occurred (see Observation #2). Also, who is currently responsible (what FDEP program/Section) for the ditch system in this area? Who is your contact at FDEP and how often do they make site inspections?
5. **Observation #5; Current Surface and Subsurface Soil Status; Page 2:** In the draft CMS Report for these SWMUs it was deemed appropriate to evaluate soil independently at each of the SWMUs for corrective action due to the physical separation of the SWMUs. As a result of the alternative evaluations conducted in the CMS, it was recommended that LUCs and periodic site inspections be implemented at each SWMU (deemed necessary to address contaminated surface and subsurface soils throughout the SWMUs).
6. **Observation #6; Current Surface and Subsurface Soil Status; Page 2:** As a result of comments received from the FDEP after a review of the draft CMS Report, it was agreed in the January 2007 NAVSTA Mayport Partnering Team Meeting that investigational data at these SWMUs may not be sufficient to delineate the boundaries of soil contamination under industrial use land conditions.
7. **Observation #7; Revised Soil COCs for Surface and Subsurface Soil; Page 3:** Based upon the April 2005 SCTLs updated by the FDEP, the lists of surface and subsurface soil COCs presented in the draft CMS Report for these SWMUs were revised. Also, current FDEP regulations state that site concentrations for carcinogenic polycyclic aromatic hydrocarbons (PAHs) must be converted to benzo(a)pyrene equivalents before comparison with the appropriate direct exposure SCTL for benzo(a)pyrene. It should be noted that during the re-evaluation of COPCs at these SWMUs based on the new SCTLs, leaching to surface water was not considered for SWMUs 2, 3, and 22 because these three SWMUs are generally greater than 300 feet away from the nearest surface water body. However, leaching to surface water was considered for SWMUs 4 and 5 as there are surface water bodies located near the outer boundaries of these two SWMUs.
8. **Observation #8; Revised Soil COCs for Surface and Subsurface Soil; Page 3:** Based on the re-evaluation of COPCs, it was determined that there are no surface soil COCs present at SWMUs 2 and 22. However, a re-evaluation of surface soil COPCs at SWMUs 3, 4, and 5 concluded that COCs are present at these SWMUs. Please see the report for the contaminants that made the COC list at each SWMU.
9. **Observation #9; Revised Soil COCs for Surface and Subsurface Soil; Page 3:** A re-evaluation of subsurface soil COPCs was also performed and several subsurface soil COCs were detected at SWMUs 2, 3, 4, 5, and 22. Please see the report for the contaminants that made the COC list at each SWMU.
10. **Observation #10; Proposed Site Activities; Page 4:** TtNUS will collect soil samples at SWMUs 2, 3, 4, 5, and 22 using the techniques and methods discussed below. The collected samples will be submitted to a fixed-based laboratory for select analyses. Subsurface soil samples will be collected with a direct push technology rig at

approximately 3 locations at SWMU 2, 12 locations at SWMU 3, 9 locations at SWMU 4, 16 locations at SWMU 5, and 5 locations at SWMU 22. In addition, 10 surface soil samples will be collected at SWMU 5. Field activities will be conducted during an approximate 5-day period. If required, a second field sampling event may be conducted to complete the delineation of soil contamination.

- 11. Comment #1; Proposed Site Activities; Page 4:** It seems the additional soil sample locations chosen for this additional sampling event at these SWMUs are appropriate. However, I do question the depths at which the samples will be collected from. How were these sample depths chosen? Why is a large portion of the vadose zone not being sampled at each of these sites (no samples being collected from 2 feet bls until as early as 4 feet bls, and as deep as 8 feet bls)? Was this area already sampled during previous sampling events? Please explain.
- 12. Comment #2; Surface and Subsurface Soil Sampling; Surface Soil; Page 5:** The first sentence of this section states "Since there were no surface soil exceedances of FDEP residential direct exposure SCTLs at SWMUs 2, 3, 4, and 22, it is not required that any surface soil samples be collected at these SWMUs." Were these leaching criteria exceedances delineated at these SWMUs (3 and 4)? No data is provided in this report for me to be able to make a determination on that. All exceedances should be delineated out to below FDEP SCTL criteria(s). Please explain.
- 13. Observation #11; Additional Soil Delineation; Page 6:** If laboratory results indicate that additional samples are required to complete the delineation of the extent of soil contamination, a second field sampling event will be conducted. The number and locations of samples will be determined after reviewing the results from the first event. Any additional sampling will follow the protocols outlined in this work plan. Having reviewed this SSWP, it is my belief additional sampling may need to take place. Also, when reviewing the upcoming data set, I would expect to see a full data set which shows past and present analytical results for, at a minimum, surface and subsurface soil samples using tables, figures, and text as needed. It will be very difficult for me to have to review several documents instead of having it all in one document.
- 14. Technical Report of the Ditch System at NS Mayport SWMUs 2, 3, 4, 5, and 22:** I have reviewed this document. There is no date of creation for this document, nor is there a date associated with the time that my office received it. However, this office did receive it from the Navy (Diane Racine, of the NS Mayport Environmental Office, produced it) by hand at a past Partnering Team Meeting. I have several comments which are: 1) Please show data that supports the Navy's conclusion concerning groundwater to be below all action levels, and that the surficial aquifer is not Class G-I or G-II. Also, the "groundwater is not anticipated for future use" is not an argument the FDEP accepts for meeting groundwater standards; 2) This document lists, per the CMS (date of the CMS is unclear), COCs for surface and subsurface soil, groundwater, sediment, and surface water, and also describes the remedial action for several media (LUCs and/or LUCs with monitoring). This seems to contradict some of the statements from the section on the first page of this document titled "1996 RFI Report Findings and Recommendations for SWMUs 2, 3, 4, 5, and 22."; 3) This office would be willing to support LUCs at these SWMUS to allow for continued industrial use of these properties, although, I would need to review the data which supports this action; 4) How are the ditches being addressed under the FDEP Stormwater Program? Who is your contact at FDEP? Are the permits up to date?; 5) Are sampling, analysis, and possible removal of the sediment in the ditches a routine (yearly, every 5 years, etc.) occurrence under the Stormwater Permits mentioned in this technical report? An interim removal action for the sediments in the ditch system was conducted by

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the Navy following the CMS that was produced for these SWMUs (date is unclear).
Seems as if this should be a regular occurrence. Please discuss.

Thank you for the opportunity to review this document. If you require additional clarification or other assistance, please feel free to contact me at 850/245-8999.

Sincerely,



John Winters, P.G.
Remedial Project Manager

JJC  ESN 

cc Tim Bahr, FDEP, Tallahassee