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NAS CECIL FIELD, FL
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LETTER REGARDING U S EPA REGION IV COMMENTS ON DRAFT REMEDIAL DESIGN FOR SOILS AT OPERABLE UNIT 3 (OU 3) SITE 7 NAS CECIL FIELD FL
12/21/1998
U S EPA REGION IV

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

December 21, 1998

4WD-FFB

Commanding Officer
Attn: Mr. Scott Glass
SOUTHNAVFACENGCOM
2155 Eagle Drive
P O. Box 190010
North Charleston, South Carolina 20419-9010

Subject: Draft Remedial Design for soils at Site 7, OU 3, NAS Cecil Field, Jacksonville, Florida

Dear Mr. Glass:

The U. S. Environmental Protection Agency has completed its review of the subject draft report. It is understood that the remedial action has been implemented and has largely completed, and some of the comments below may therefore be after the fact. However, the comments below address the draft design and should be taken into consideration before this remedial action is assessed as complete.

General Comments

1. The text in the Draft Remedial Design should be expanded to include a brief discussion of the Baseline Risk Assessment and the rationale for the selection of the initial remedial depth. It is expected that contaminated groundwater associated with this site would be addressed under a remedial action for OU3; however, this is not stated. The text should clarify this issue.

2. The selection of the cleanup criteria (TRPH concentrations which exceed 350 mg/kg) requires further discussion. While the basis of this value is the Florida Brownfields Cleanup Criteria Rule, TRPH is composed of several petroleum constituents. Applying

the umbrella of 350 mg/kg may allow these individual constituents to remain at the site above acceptable risk concentrations. The text in the Draft Remedial Design should be expanded to address this issue.

Specific Comments

1. **Page 2-1, Second, Third and Fourth Paragraphs**. Based on the Investigation History discussion in these paragraphs, it appears that the investigation involved only the collection of surface soil samples, and these samples were only analyzed for PAHs, TRPH, and lead. We know from the RI this was not necessarily the case. Given the history of the site as a firefighting training area where waste solvents, paints, paint thinners, and fuels were ignited, the text should clarify whether these analytical parameters were included in the previous investigations and the depths sampled.

2. **Figure 2-1, Surface Soil Excavation Limits Based on Residential Criteria**. Based on the data shown in this figure, the lateral extent of contamination does not appear to have been adequately defined to the northwest of Area 1 and to the east and south of Area 9. However, the BCT agreed to limit remedial action east of Area 1 due to the road and south of Area 9 because it became part of the flightline. A discussion explaining BCT established limits to the excavation should be added.

3. **Page 3-2, Second Paragraph**. The text states that the soil does not contain listed hazardous wastes and therefore should not require disposal at a hazardous waste treatment facility. However, the soils also may be hazardous by characteristic. An established rule of thumb used to determine the potential for the exceedance of Toxicity Characteristic Leaching Procedure (TCLP) limits mandates that the total concentration of the regulated analyte be divided by 20 and compared to the regulatory limit for that analyte. For example, lead was detected at 2,170 mg/kg at CEF-07-SS-124-01. Dividing this value by 20 produces 108.5 mg/kg, which is several times greater than the TCLP limit of 5.0 mg/kg. This indicates that the soil, and any soil with total lead concentrations greater than 100 mg/kg (20 times the TCLP limit of 5.0 mg/kg), could potentially be hazardous waste. As shown in Appendix A, several soil samples contained lead at levels greater than 100 mg/kg. In addition, this point raises the potential need to segregate the soil into separate stockpiles (assumed non-hazardous waste and potentially hazardous waste) based on the pre-remedial data. The draft Remedial Design should address these issues.

4. **Page 3-2, First Paragraph**. The estimate of the excavation volume (3,910 cubic yards of soil) may be greatly underestimated since it is based on the assumption that the contamination in excess of the remedial goals only extends to 1 foot below the surface (see General Comment No. 1). The volume of soil to be excavated and disposed off-site has a significant impact on the cost estimate. As a result, it is recommended that the volumes be re-evaluated to ensure the most accurate estimate possible, and that a cost sensitivity analysis be conducted and provided as an appendix.

5. **Pages 4-2 and 4-3, Table 4-1**. The header on this table should be changed from Site 8 to Site 7.

6. **Page 5-1, First Paragraph**. This section provides steps 1 through 12 of the remedial action sequence.

   Under Step 7.2, it is stated that stockpiled soil, if required, will be stored on, and covered with, plastic sheeting. The words "if required" should be removed. To protect the surrounding environment from contamination, stockpiles should always be lined and covered.

   Under Step 12, it should be noted that the temporary erosion and sediment controls measures should not be removed until the vegetative cover is fully established. In addition, the final depths of the excavation may warrant access restriction and worker protection measures.

7. **Page 6-1, First Paragraph**. The text states that confirmatory samples will be collected from a depth of 0 to 12 inches below the base of the excavation. Confirmatory samples should be collected from the base of the excavation, not up to 12 inches below the base of the excavation. The text should be corrected. Note that confirmation samples should not be composited. Compositing samples may dilute the sample, resulting in a decision which may allow contamination in excess of the remedial goals to remain in-place. In addition, consideration should be given to including additional analytical parameters in the confirmation sampling analysis (e.g., Target Compound List (TCL) SVOCs) to confirm that the individual components of TRPH are not above acceptable risk limits.

   Overall, the text proposes that 34 confirmation samples are adequate for an area of approximately 105,300 square feet (based on an excavated volume of 3,901 cubic yards at a depth of 1 foot) which translates, on a gross site-wide average, to one sample per 3,098 square feet, or one sample per 55 ft by 55 ft square. It is understood that the BCT agreed upon this sampling plan, however, the rationale for selecting the number and location of confirmation samples should be provided.

8. **Page 6-1, Third Paragraph**. For ease of identification, the sample nomenclature should include the depth from which the soil sample was collected.

9. **Page 6-7, Third Paragraph**. The analysis for the confirmation samples should be turned around quickly to reduce down-time costs and backfill the excavation as soon as possible. This paragraph should provide the turnaround time that will be requested from the laboratory.

10. **Page 6-5, Table 6-1**. This table suggests that TCLP tests will be performed on the soil samples, including volatiles, pesticides, and herbicides. Since the Contaminants of Concern (COCs) at the site have been identified as TRPH, PAHs, and metals, the need to include TCLP volatiles, pesticides, and herbicides is unnecessary. This table should be

revised appropriately. The BCT agreed to limit the sample analyses for many of the confirmatory sample locations based on historical sample results. This information should be added to the design.

11. **Page 6-7, Fifth Paragraph**. It is stated that formal data validation has been eliminated from the installation restoration program at NAS Cecil Field and that TtNUS personnel will review the data to eliminate false positive and false negative results. Though the BCT agreed to the elimination of formal data validation for portions of the installation restoration program at NAS Cecil Field, the results of the confirmation samples are critical to ensure that the remedial action objectives have been met and this confirmation data warrants more than a cursory review to identify false positive and false negative results. A more thorough review of the confirmation sample data should be considered.

Thank you for the opportunity to review the draft design. If you have any questions, please contact me at 404/562-8539.

Sincerely,

Deborah A. Vaughn-Wright

Deborah A. Vaughn-Wright
Environmental Scientist

cc: Mark Davidson, SOUTHDIV, Mail Code 1879
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