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NAS CECIL FIELD
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LETTER AND U S EPA REGION IV COMMENTS ON REMEDIAL
INVESTIGATION/FEASIBILITY STUDY NAS CECIL FIELD FL
11/22/1999
U S EPA REGION IV



File Cd-11
Cecil Field

Rec'd 11/29

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

32215.000
03.01.00.0003

4WD-RCRA

NOV 22 1989

Ms. Monique Williams
NAVFAC-ENGCOM
Southern Division
Post Office Box 10068
Code 11438
Charleston, South Carolina 29411-0068

RE: RI/FS Review Comments - Cecil Field TRC Committee

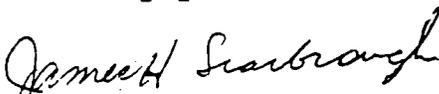
Dear Ms. Williams:

We have reviewed the Remedial Investigation/Feasibility Study (RI/FS) Work Plan, Field Sampling and Analysis Plan (FSAP), Quality Assurance Project Plan (QAPP), Health and Safety Plan (HSP) and Site Management Plan for Cecil Field. All of the above mentioned plans were well organized, however, there are questions and problems that need to be answered, prior to EPA approval.

Due to the nature of the study and number of solid waste management units (SWMUs) involved, it is possible that some areas may have been overlooked. Because of this, there might be additional questions about potential SWMUs at the time of the TRC meeting. Every effort will be made to avoid duplication between the Resource Conservation and Recovery Act (RCRA) and CERCLA requirements. We wish you all the success with your project in cleaning up the environment.

If you have any further questions or comments, please contact Mr. Harry Desai of my staff at (404) 347-3433.

Sincerely yours,


James H. Scarbrough, P.E.
Chief, RCRA Branch
Waste Management Division

cc: Satish Kastury, FDER, Tallahassee
Northeast District Office, FDER

NAVAL AIR STATION
CECIL FIELD
RI/FS COMMENTS

DRAFT RI/FS PLAN

1. Section 4.2 (page 4-9); The plan states that "---the Phase II groundwater assessments will be restricted to the superficial aquifer since the migration potential from the superficial aquifer to the secondary artesian aquifer has not yet been defined." No plans are discussed in the Work Plan as to when or how this migration potential will be defined. Should contaminants be detected at levels exceeding ARARS in the superficial aquifer, this contaminant migration assessment should be conducted.
2. Soil borings and monitor wells are proposed into areas of possible waste disposal. This practice is not suggested by EPA due to hazards to the workers involved. It is suggested that extreme caution be used during such activities.
3. No soil samples are proposed for site 18. It is difficult to understand how a potential source area will be identified through only two surface water and sediment samples. It is suggested that additional source work be proposed for this site.
4. Figure 4-16; No soil borings are located on this figure. However, 10 soil boring locations are identified on Table 4-17. This discrepancy needs to be explained.
5. The proposed phased approach for the study of groundwater contamination at the various sites on NAS Cecil Field is good. However, the proposed plan of attack is not well understood for a number of sites. For those sites where existing monitoring wells provide a detection monitoring network with previous positive detections of contaminants, an assessment monitoring phase should be initiated. This would call for an array of monitor wells placed such that the nature and extent of the groundwater contamination can be defined. However, at all sites where positive detections in groundwater have occurred, only additional monitor wells in the immediate vicinity of the source areas are proposed in the Work Plan. Only Site 1 looks to have an adequate monitor well network as proposed. Therefore, we suggest that an assessment monitoring network be proposed for sites 2, 3, 4, 5, 7, 8, 10, 11, 16, and 17. An adequate monitor well system is necessary to define the nature and extent of the ground-water contamination at these sites.

6. At all sites on the NAS Cecil, a detection monitor well network is necessary to determine whether contaminants have been released to the groundwater. The proposed work is adequate for all sites with the exception of sites 9 and 18. Monitor wells are not proposed for either of these sites during the planned phase. It is understood that following source characterization a detection monitor well network will be installed if necessary. If this is the intent for sites 9 and 18, then this should be explained in the Work Plan. Problems also exist with the proposed monitor wells for Site 12. On Figure 4-10 it is noted that the groundwater flow direction is unknown. However, an arrow showing an easterly groundwater flow direction is provided. If this assumption is true, then all of the three proposed monitor wells will be upgradient of the source. It is suggested that this site be re-evaluated so that an adequate detection monitor well network is proposed.
7. Site 13 - Day Tank Fuel Spill - This SWMU is not included in the Work Plan. In the RFI Work Plan a "No Action" proposal was considered premature because only of the 50% of the fuel has been recovered. It was also suggested that a demonstration of natural degradation by fertilizer addition be made. Additional work should be performed to establish fuel migration.
8. Naturally occurring metal concentrations need to be established.
9. The location any of groundwater wells within a one mile radius of any of the SWMU's should be provided.
10. Preliminary data indicates that the depth of the monitoring wells have some effects on the analysis of the samples taken, e.g., metals and hydrocarbons. This should be investigated, and the submittal plan should include the results of this study.
11. Project Management Plan - This plan should include a discussion of the technical approach, schedules, and personnel used that will be used to conduct the work and the report preparation. The project management plan should also include a description of qualifications of personnel performing or directing the RI/FS, including contractor personnel.
12. Additional information is needed to describe the development and initiation of a data management plan, which will be used to document and track investigation data and results used in the previous reports. This plan should describe procedures used to identify and set up data documentation materials and procedures, project file requirements, and project-related documents.

13. The groundwater monitoring plan does not provide a strategy to determine the horizontal and vertical extent of any plume of contamination. A detailed plan of study should be provided to cover the horizontal and vertical extent of the plume, horizontal and vertical direction of contaminant movement, velocity of contaminant movement and concentration of constituents within the plume. The data evaluation should include the factors influencing contaminant movement and extrapolation of future migration of the contaminant.
14. For determining the extent of groundwater contamination (plume deliniation), it is suggested that sites proximal to each other be combined/clustered and additional monitoring wells be installed to surround these "cluster" areas. This method of determining the extent of hazardous waste migration might prove to be the most efficient and cost effective.
15. Groundwater sample analyses for different sites shows some erratic results regarding hazardous waste constituents found in deeper wells, e.g., Site 10 and Site 3. This should be explained prior to initiating an extensive monitoring program.
16. Potable well study - Section 2.4.4. (Page 2-8) Only five (5) potable wells were sampled and analyzed. However, on page 2-33 more than five wells are reported. Also from Figure 2-8 it seems that all the wells sampled are near to one site. Therefore, the "no contaminants found" conclusion is not adequately justified. Other potable wells should be sampled and analyzed.
17. For most of the sites suspected waste reported to be solvents and paints. However, groundwater analysis shows only metals. This kind of analysis and pattern needs to be explained.
18. Site 13 was recommended for further study by FDER (Page 1-2). It is also a part of the SWMU list. Therefore it should be included in the work plan.
19. Page 1-4 - Section 1.4 identified contaminants at 12 sites. However, Section 1-3 mentioned only 10 sites for further investigation. This discrepancy needs to be explained. Based on preliminary study and analysis it seems that all of the sites should be investigated.
20. The RI/FS should address the RCRA requirements and show how it will be intergrated with the CERCLA activities. It should be pointed out that all requirements mentioned in the permit, Attachment A, Section I and Section II, should be evaluated for their applicability at all SWMUs.

21. The description of sites include types of waste disposal in the waste unit. However, the sample analysis does not reflect the waste discharged at the site. Therefore, it is suggested that all initial samples at all sites be analyzed for Appendix IX.

NAVAL AIR STATION
CECIL FIELD
RI/FS COMMENTS

DRAFT FINAL SAMPLING AND ANALYSIS PLAN

1. Correction to Table 4-2

- a. There were no MCLs proposed in the Federal Register in 1988. Therefore, the asterisk in the Federal MCL column should be deleted.
- b. Fluoride also has a primary MCL of 4000 ug/L.
- c. 2,4,5- TP should be 10 mg/L in column "MCL(b)." The 52 Mg/L should be inserted in the column "MCLG(d)."
- d. The 10 ug/L for nitrate in column "MCLG(c)." should be moved to the column "MCLG(d)."
- e. Radionuclide units are pci/L.
- f. The column "MCL(b)" should show the same microbiological MCLs as those shown for Florida primary.
- g. FR 52 25690, July 8, 1987, established MCLs as follows:

Benzene - 5 ug/L
Vinyl Chloride - 2 ug/L
Carbon tetrachloride - 5 ug/l
1,2 dichloroethane - 5 ug/L
trichloroethylene - 5 ug/L
1,1 - dichloroethylene - 7 ug/L
1,1,1 - trichloroethane - 200 ug/L
Para dichlorobenzene - 75 ug/L

- h. The column "MCL(b)" should show the same gross alpha MCL as that shown for Florida primary.
 - i. Under the footnote (2nd line) the word "contaminated" should be changed to "contaminant."
2. There are some corrections that need to be made to Table Z:

a. Analysis

Preservation

Boron	HNO3 to PH<2
Chlorine Residual	None
PH	None
Sulfite	None

- b. Region IV policy is not to filter samples for metal analysis.
- c. All water and wastewater samples collected for Volatile organic compound (VOA) analysis are to be preserved with 4 drips of 1:1 HCl per 40 ml VOA vial.
- d. Samples collected from water supplies or wastewaters must be dechlorinated. Region IV policy is that water and wastewater samples for VOA analysis are to be dechlorinated by ascorbic acid and not sodium thiosulfate; however, it is still used to dechlorinate samples for extractable organic compound analysis.
- e. The "HCL" (capital L) preservation shown for TOC should be "HCl."
- f. Same comment as e. for petroleum hydrocarbons.
- g. Same comment as e. for purgeable aromatics.
- h. The H₂SO₄ shown under TKN in the "Analysis" column should be in the "Preservation" column.
- i. The NaOH and H₂SO₄ shown in the "Minimum Amount" column for organochlorine pesticides should be in the "Preservation" column. Also, the PH adjustment is 6-9, not 5<9.
- j. Preservation of trihalomethane samples does not include the addition of the H₂SO₄; however, it does not require the addition of ascorbic acid for dechlorination purposes.
- k. Sample containers for all of the organic parameters must be glass with Teflon-lined caps or septa.

WORK PLAN AND SAFETY PLAN

A. Work Plan Typo Corrections

- 1. Section 4, Table 4-1 -- Rather than specifying the various levels of data quality, this table discuss the objectives they hope to accomplish during each of the four phases of the project.

2. Section 4, Tables 4-3 through 4-20 -- The correct symbols for arsenic and selenium are As and Se, respectively.
3. Section 5, Tables 5-3 and 5-4 -- See comment number 2 concerning selenium.
4. Section 5, Table 5-1 -- Task Number 5.2 and the sub-tasks identified under it are not in the narrative under 5.2 through 5.2.2.
5. Appendix D, last two pages --
 - a. Although the heading for this unnumbered table is "Florida Drinking Water Standards and EPA MCL Comparison," only the Florida Drinking Water Standards are shown.
 - b. None of the footnotes are applicable to the information provided.
 - c. Under "Sources," the second word in the second line should be "Contaminant" rather than "Contaminated."

B. Health and Safety Plan

There should be a map and directions to the nearest hospital as well as emergency telephone numbers.

Pg 848