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NAS WHITING FIELD
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LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF ENVIRONMENTAL
PROTECTION REGARDING DRAFT REMEDIAL INVESTIGATION/FEASIBILITY STUDY
PHASE IIC WORK PLAN SITES 3, 4, 30, 32 AND 33 NAS WHITING FIELD FL
5/28/1997
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Department of Environmental Protection

09.01.03.0001

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Lawton Chiles
Governor

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Virginia B. Wetherall
Secretary

May 28, 1997

Ms. Linda Martin
Department of the Navy
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, PO Box 190010
North Charleston, SC 29419-9010

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RE: Draft Remedial Investigation/Feasibility Study (RI/FS) Phase II-C Work Plan, Sites 3, 4, 30, 32 and 33, NAS Whiting Field

Dear Ms. Martin:

I have reviewed the subject document dated March 1997 (received March 11, 1997). The document is generally well written; however, the following comments should be adequately addressed in the final draft:

1. The document has a green cover. Previous Navy documents were furnished with white (for draft) documents and green covers were furnished with corrected pages or on the final document. I would prefer to maintain this practice in the future to insure consistency; however, I am willing to accommodate this apparent change should this be your desire.
2. Figure 1-2 is adapted from an existing figure; however, the scale as it relates to the data presented is rather small. I know this is picky, but this is important in the overall work effort at each site. Figure 2-2 is more workable and is a good example.
3. Section 2.6, page 2-28: proposes installation of a well to the top of the clay to identify free-phase DNAPLs, if present. I have two comments in this regard: first, it seems that knowledge of the gradient of the clay layer is mandatory if this approach is used since the DNAPL could (or may have) migrated downgradient, away from the source area; second, does the data for the aqueous phase DNAPLs indicate, stoichiometrically, that a "source" may be still (was ever) present? Since this will be an expensive well, I want to assure that such a well would yield useful data.
4. Section 2.6, page 2-29: does the possibility that workers and residents *could* be exposed to untreated ground water at NAS Whiting constitute the contaminant release scenario? I note that the base is presently under regulatory constraints which mandate GOC treatment of potable water produced at Whiting. This should be acknowledged within the context of

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this section and in the evaluation. A realistic scenario which could be considered would be one which examines the risk to humans using small private wells with the risk occurring from off-base migration of contaminated ground water.

5. Page 2-37, Groundwater "bullet": the use of existing data and data from additional sampling of existing wells should be stated.
6. Table 2-3: I have problems with the use of definitives ("will, is, does not"). I am not sure that natural attenuation will prevent further migration of the aqueous plume. I know that this is a table of uncertainties, but less definitive language would be useful. Additionally, it seems to me that the biggest uncertainty is the effect of the ground water plume(s) on Clear Creek and associated habitats, which has been omitted. I recognize that we are all hoping the contamination doesn't migrate under Clear Creek; if it doesn't, where does it discharge?
7. Table 2-5: are Level II data adequate for receptor surveys, especially in the case of Clear Creek? I'm not saying it isn't; just that we need to be sure.
8. Page 3-1: Please add "and addenda" to the RAGS reference.
9. Section 3.1.3.7 (and others): what constitutes "extreme care?"
10. Section 3.1.3.9 Residual Free Product Detection: Please explain how the Residual Free-Product Detection in Soils techniques will be utilized in the assessment.
11. Page 3-82, Investigation Scope; Page 3-99 and others: the extent of soil contamination determination should also consider Florida Soil Cleanup Goals (1995) and/or the contaminated soil criteria which may included in the revised Chapter 62-770, F.A.C., presently expected to be adopted early this summer.
12. Figure 3-5: is the bi-lobed area depicted near Site 6 a plume outline, site boundary, or other differentiation of the site?
13. Page 5-4: State of Florida Soil Cleanup Goals should be dated as 1995.
14. Section 5.1.3.2, Identification of Exposure Pathways and Receptors and Table 5-1, Proposed Human Health Receptors to be Evaluated for Current Land Use: I am unsure of the worth of conducting an assessment for military residents. How will this be achieved, considering the fact that there are no residential areas on these sites?
15. Page 5-6: it may be picky, but the word "contaminates" is used in a number of cases where it is obvious that the word should be "contaminants." These should be corrected.

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16. Page 5-12, Carcinogenic Risks: it seems to me that a statement similar to that on the following page (page 5-13) beginning with "In accordance with FDEP..." belongs in the discussion in this paragraph, especially following the EPA range statement of 10^{-6} to 10^{-4} .
17. Figure 5-1: in the "Notes" area, "Environmental" is misspelled.
18. Section 5.2.1.3, page 5-19, Identification and Characterization of Ecological Receptors and habitats: it is my understanding that NAS Whiting has a resident or part-time ecologist. She or he should be utilized in developing this study area.
19. Section 5.2.2.1, Exposure Point Concentrations: please identify the "simple" model that will be utilized for predicting dietary exposures.
20. Table A-1: the Northwest Florida Water Management District has well permitting authority and requirements which should be acknowledged and their rules should be added to the table. This was recently learned (the hard way) by the SCAPS group during their recent visit to NAS Whiting Field.
21. Table A-1: it would be best to reference the Florida Petroleum Contamination Rule, Chapter 62-770, F.A.C., with the existing date since the newer version of the rule has not yet been adopted. Also, change the "17-770" reference to "62-770."

Following are comments regarding the risk assessment parameters in Appendix C. I suggest that since the field of risk assessment is in a state of flux and many values are based on professional judgment, these comments, along with those of EPA be evaluated concurrently.

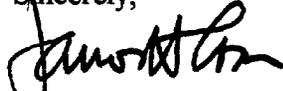
22. Table C-1: Child Value/Adult Value Columns need aligning; "Chemical Specific" reference needs aligning. Check all tables in this regard.
23. Table C-1: There appears to be a discrepancy for the adult and child inhalation rates. I refer to the Supplemental Guidance to RAGS: Region 4 Bulletins 1 through 5, November 1995 for guidance. Based on the $15 \text{ m}^3/\text{day}$ value in Bulletin 3, I calculate the child rate to be $0.625 \text{ m}^3/\text{hour}$.
24. Table C-2: Bulletin 3 states the child exposure duration as 10 years instead of 11. Additionally, the body weight for an adolescent is given as 45 pounds instead of 40.
25. Table C-3: Soil ingestion rate; I don't have a problem *per se* with using $50 \text{ mg}/\text{day}$ for this value, but Bulletin 3 suggests the range of 50 mg to 480 mg per day, depending on your specific assumptions.
26. Table C-4: the value for inhalation rate is missing. I suggest that it is $0.833 \text{ m}^3/\text{hour}$.

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27. Table C-5: the value for surface area for a construction worker is given as 5750 cm². I suggest that this value be checked. For reference, the State of Florida value which is derived from the USEPA Dermal Exposure Assessment, 1992, is given as 2000 cm² in: Technical Report: Development of Soil Cleanup Target Levels (SCTLs) for Chapter 62-770, F.A.C., May 1997.
28. Table C-6: as previously stated, I question the use of this scenario and thus, this table.
29. Appendix D, IDW Management Plan: the document is marked with a "draft" designation. The Whiting IDW Plan has been finalized and adopted. Please confirm that this is the final document.
30. The final document should be properly signed and sealed according to Florida Statutes.

While it may appear that this document required a great many comments, I think it is well conceived. I appreciate the opportunity to review it and I look forward to our review of it at an upcoming partnering meeting. If you have questions or require further clarification, please contact me at (904) 921-4230.

Sincerely,



James H. Cason, P.G.
Remedial Project Manager

cc: Craig Benedikt, USEPA Atlanta
James Holland, Naval Air Station Whiting

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