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NAS WHITING FIELD
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LETTER AND FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION COMMENTS
TO DRAFT TECHNICAL MEMORANDUM NUMBER 5 FOR REMEDIAL
INVESTIGATION/FEASIBILITY STUDY GROUNDWATER ASSESSMENT NAS WHITING
FIELD FL
5/12/1995
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Lawton Chiles
Governor

Department of Environmental Protection

09.01.00.0067

00375

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Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

May 12, 1995

Mr. Jeff Adams
Department of the Navy
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, P.O. Box 190010
North Charleston, S.C. 29419-9010

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RE: Review of Draft RI/FS Technical Memorandum No. 5, Groundwater Assessment, NAS
Whiting Field

Dear Mr. Adams:

I have reviewed the above document dated March 1995 (received March 24, 1995) and offer the following comments:

1. Typographic and other minor errors have been presented to and discussed with ABB personnel in order to save time. This does not include references to the soil assessment in the Executive Summary. This should be corrected.
2. On page 4-3, please include and utilize the FDEP document *Ground Water Guidance Concentrations, June 1994*.
3. On page 4-5, the discussion of the BAT sampling results indicates that some constituents could have resulted from the sampler components or laboratory contamination. I cannot disagree; however, acetone is a common solvent and methylene chloride is commonly used for stripping paint. Since these materials are included in the contamination evaluation that we are conducting, additional use of this technique increases the difficulty of our evaluation. This idea is reinforced by one sample with a relatively high concentration of acetone—was it an artifact? In the case of acetone, since it has a guidance concentration that is higher than the observed value, it is less problematic than those observed values for methylene chloride, which were determined at a level over twice the primary standard. If contamination is suspected from the components of the BAT sampler, further usage of it should be curtailed or a better equipment blank evaluation method should be adopted. These comments are also appropriate for the summary discussion of the BAT sampling in Section 5.1.

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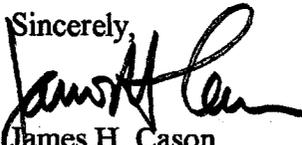
4. On page 4-2, it is stated that the facility does not have intermediate or deep background monitoring wells. In view of the fact that chlorinated solvents are one of the primary concerns in this investigation and they are denser than water ("sinkers"), it seems prudent that the Navy would have at least one of each of these types of wells as part of the investigation. Does the Navy intend to install such wells? If not, why?
5. Related to comment 3 (above), a discussion of the general relationship of the BAT sampling zones should be presented. These comments should be correlated with the shallow, intermediate and deep zones discussed in general about the site. These zones should be defined by a depth range classification related to both NGVD and BLS datum references. Additionally, all site wells should be classified using these criteria and their type presented in tabular and graphic form.
6. Table 4-3 presents the field parameters; most of the samples have conductivity below 100 umhos; however, some are quite high and even though those up to 500 umhos are suspect, those above 1000 umhos indicate the presence of dissolved constituents. I understand and generally agree that grout leakage could cause some of the high pH values and these typically were observed with some of the high conductivity samples; however, the highest conductivity value also had a pH value in the acid range (pH of 5.75 at WHF 3-2D). These aspects should be considered "flags" and subsequent sampling of these sites should take this into account, and if the data are consistent, rational conclusions as to the reason should be pursued.
7. In Table 4-4, several inorganic constituents exceed the MCLs, assumably as a result of acidifying turbid samples. I understand that this problem is being considered, along the lines of filtering the samples, using a newer teflon pump, etc. The Navy should consider it a priority to obtain non-turbid, unfiltered samples to help assure confidence in the analytical determinations.
8. As discussed on page 4-15, what is proposed concerning the presence of contaminants in background well WHF-BKG-3? The presence of 4 ug/L benzene (MCL = 1ug/L) and 13 ug/L toluene indicates contamination. Related to this, in all tables presenting background values, if the "background" values exceed MCLs, they should be shaded so as to indicate their exceedance of the MCLs. What is proposed in cases where non-natural constituents (such as benzene) exceed the MCLs by several times? What about natural constituents such as nickel (Table 4-23) with a value of 700 ug/L which exceeds the MCL by seven times?

9. In the discussion of inorganic analytes, the relationship of high sample values and turbid sample acidification is discussed repeatedly (with each site). This is not really necessary - once at the beginning of the analytical discussion would suffice; repeated discussion provides little additional information. Similarly, each time the inorganic MCLs are exceeded, a table showing the MCLs of those particular analytes is presented. If this approach is retained, please at least add a column showing the analyte concentration or range of concentrations. Even better, one table showing the MCL of all the analytes, presented one time, would suffice.
10. In Table 4-9, the State MCLs for toluene and ethyl benzene are in error; they are, respectively, 40 ug/L and 30 ug/L (secondary standards). When applied, the toluene and ethyl benzene values in WHF-32-2 and the ethyl benzene values in WHF-42-3 exceed the MCLs and should be shaded. All tables with these background screening values need correction.
11. Because of their importance in relation to the overall site contamination, the location of base potable production wells should be included on isoconcentration maps (such as Figure 4-1 to Figure 4-5). Additionally, the physical parameters for these wells (diameter, screen dimensions, etc.) and pumpage numbers should also be included in TM-5. The Navy should also obtain and utilize pre-GAC filtration (raw water) analyses for chlorinated hydrocarbon values from these wells in the assessment.
12. On page 4-47 and Table 4-30, it is stated that there are no MCLs for chloromethane. This is in error; chloromethane, also known as methyl chloride (CAS 74-87-3) and has an MCL in *Ground Water Guidance Concentrations, June 1994* of 2.7 ug/L. This correction needs to be applied to other tables, as needed. In fact, most of the State MCLs in Table 4-30 and 4-32 are in error and should be corrected.
13. In Table 4-13, page 4-48, the well identifiers and the sample identifiers for the shallow and deep monitoring wells appear to be transposed. Please correct them.
14. Figure 4-3 illustrates the data gap to the south and west of the WHF-6 well cluster. Does the Navy intend to install additional wells in this area?
15. A summary map showing the chlorinated hydrocarbon plume(s) in the three aquifer zones over the entire installation is needed and should be refined as additional data are acquired. This is essential to an overall understanding of the contamination at the facility.

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16. On Table 4-18, what do the --/-- symbols mean? Explain or correct them.
17. On pages 4-85, 4-89, 5-7 and Table 4-26 and 4-28, it is stated that there is no state MCL for acetone. This is in error; the value is 700 ug/L. This error appears throughout TM-5 and should be corrected. The same similar situation exists on page 5-5 where it is stated that there is no State MCL for dieldrin; there is - it is 0.1 ug/L. On page 5-7, no MCL is given for 4-methyl-2-pentanone; this compound is also known as methyl isobutyl ketone and the MCL is 350 ug/L. The xylene MCL is 10,000 ug/L (primary) and 20 ug/L (secondary). These errors are basic and simple reference to the Guidance Concentrations publication would prevent them. All MCLs should be verified.
18. Please change the site numbering to correlate with the new numbering scheme. Additionally, an explanation of the changes to enable reference to older analytical data which utilize the old numbering system should be included.

Thank you for the opportunity to review this document. If you have questions or require further clarification, please contact me at (904) 488-3935.

Sincerely,

James H. Cason
Remedial Project Manager

cc: Tom Moody, FDEP Northwest District
John Mitchell, FDEP Natural Resource Trustee
Craig Benedikt, USEPA Atlanta
James Holland, Naval Air Station Whiting
Gerry Walker, ABB-ES Tallahassee

TJB  JJC  ESN 