

# Department of Environmental Protection

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May 9, 1996

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NAS PENSACOLA  
5090.3a

**REGISTERED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Bill Hill  
Code 1851  
Southern Division  
Naval Facilities Engineering Command  
2155 Eagle Drive  
P.O. Box 190010  
North Charleston, South Carolina 29419-9010

RE: *Final Remedial Investigation Report for Sites 9, 29, and 34,*  
NAS Pensacola

Dear Mr. Hill:

I have completed the technical review of the above referenced document dated March 29, 1996 (received April 5, 1996). The document cannot be approved as final until the following comments are addressed.

1. In the Executive Summary on page xi, it states that the metals and PAH contamination in the central portion of Site 9 would be dealt with under the UST program Site 23. The PAH contamination may be petroleum related, but some of the metals which were detected at the site above Soil Cleanup Goals for Florida (SCGs) are at levels likely unrelated to a petroleum release. These include antimony (137 mg/Kg), arsenic (18.8 mg/Kg), cadmium (37.7 mg/Kg), lead (51,300 mg/kg) and manganese (444 mg/Kg). There appears to be a mixture of petroleum constituents and hazardous metals at this site. The site should therefore be evaluated under CERCLA guidance (IR Program); not the UST program.
2. In Section 5.3 (Interim Soil Removals), the last paragraph on page 5-37 indicates the same statement as mentioned in Comment No. 1.
3. In Section 7.1.3.2 (Groundwater Contamination Assessment), under the subsection Groundwater Reference Concentration Comparison, delete the phrase, "they were consistent with the range detected in NASP reference concentrations." The range is not relevant for comparing exceedences with reference concentrations.

4. In Section 7.1.3.3 (Summary and Conclusions - Site 34), on page 7-47 reference is made to a downgradient monitoring well 30GS118. The location of this well should be indicated on all groundwater related figures, and the results indicated in the analytical tables (Appendices B and D) with any exceedences of Preliminary Remediation Goals (PRGs) shown in the figure.
5. In Section 9.3 (Current Potential Receptors) on page 9-6, you should note that the lead found in monitoring well (MW) 09GR02 did not exceed state Primary Drinking Water Standards (PDWS) in a second confirmatory sample. Also, for Site 34, where MWs 34GR01 and 34GR02 had Naphthalene above PDWS, MW 34GS01 also exceeded the PDWS for lead.
6. In Section 10.1.1.3 (Organization) of the Baseline Risk Assessment, on page 10-7 the Remedial Goal Options (RGOs) should note that the values 0.1, 1, and 10 are Hazard Quotients (HQ) for non-carcinogenic COCs.
7. In Section 10.1.2.4 (Selection of Chemicals of Potential Concern), on page 10-17 the document states that organic chemicals present in site samples (CPSS) less than two times their reference concentration will not be considered further for risk assessment. This is not acceptable. Only inorganic constituents can be eliminated if below twice their reference concentration. Organic constituents must be evaluated based on Florida Groundwater Guidance Concentrations (FGGC), PDWS and Secondary Drinking Water Standards (SDWS).

Also in this section, under the subsection Comparison of essential Elements to U.S. Recommended Daily Allowances, iron has a state SDWS and sodium has a PDWS, so therefore they cannot be eliminated due to being essential nutrients.

8. In Table 10-4 (Chemicals Detected in Site 9 Groundwater) on page 10-19, copper should not be retained as a chemical of potential concern (COPC). However, iron should be retained as a COPC due to exceedences of SDWS.
9. In Section 10.1.6 (Risk Uncertainty); subsection Identification of COPCs on page 10-63, the specific names of agency representatives should be deleted, and only the representative agencies mentioned. Also, the first sentence should include a hazard index of 1 or greater for determining COPC.
10. In Section 10.1.6 (Risk Uncertainty); subsection Comparison to Reference Concentrations (Background) on page 10-64, it should note that only inorganic constituents are compared to

twice background. Organic constituents are compared only to ARARs and guidance values.

11. In Section 10.1.6 (Risk Uncertainty); subsection Evaluation of Chemicals for Which No Toxicity Values Are Available on page 10-68, it should note that the lead exceedence at Site 9 was not discovered in a second confirmatory sample.
12. Section 11.0 (Conclusions and Recommendations):
  - a. Throughout this section, reference is made to 1996 PRGs and 1995 PRGs. The document does not specify what the 1996 PRGs are. This makes the conclusions confusing comparing 1995/1996. It should just reference the most recent PRGs (federal and state). For the state those are the SCGs (1995), the state Drinking Water Standards (1992), and the FGGC (1994). If there are more recent PRGs established by the USEPA, it would be appropriate to use these for comparisons. The lowest PRG, whether federal or state, should be used for risk assessment.
  - b. In the first bullet on page 11-2 concerning Site 9, the confusion mentioned in Comment No. 12a. exists related to metals. The metals discussed in Comment No. 1 are all still above the state PRGs and cannot be eliminated as a concern.

Also in the first bullet, delete the sentence "Localized pesticide constituents were found in soil that would be consistent with a surface application scenario." Statements such as this should not be made without supporting evidence (i.e.; bibliography reference; analytical research; or known poor management practices for pesticide usage at the site). If it were due to general pesticide usage and exceeded risk, then the facility should modify its application practices to avoid creating risk.

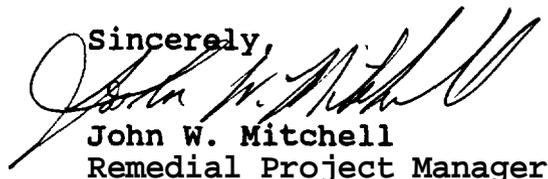
- c. On page 11-5 the last sentence of the first paragraph states the PAH and metals contamination at the west central portion of Site 9 will be remediated under the UST program. This is not necessarily true nor appropriate; refer to Comment No. 1.
- d. On page 11-6 the conclusion was not to evaluate risk from soil exposure due to 5 feet of soil being place on most of the BRAC construction area, along with 68% of the area being paved or covered with buildings. This is true for Site 29 and 34, and the eastern portion of Site 9. However, the western portion of Site 9 would be modified, but would not have additional soil cover or buildings. This is the area where soil contamination

from PAHs and metals exceeded their PRGs, so therefore risk appears evident. Unless it can be shown that the areas of soil contamination around soil samples 09S02, 09S17, and 09S18 have been remediated or covered with clean fill or buildings, then soils need to be remediated as per the Interim Removal Actions at Sites 9A, 29, and 34, or an exposure scenario will need to be evaluated for risk.

- e. The SDWS for manganese and iron was exceeded in groundwater throughout Sites 9, 29, and 34. However, lead and naphthalene exceeded their PDWS at monitoring wells 34GS01 and 34GR02, respectively. The naphthalene and lead detected appear to be related to a petroleum release rather than the detergent/solvent spill at Site 34. Further investigation of the groundwater at this site, after BRAC construction is completed, would be appropriate under the UST Program. I agree with the recommendation for no further action on the groundwater as all samples were within the upper portion of the shallow aquifer which would most likely not be used for potable water in this area. An institutional control restricting groundwater use is appropriate.

If I can be of any further assistance with this matter, please contact me at (904) 921-9989.

Sincerely,



John W. Mitchell  
Remedial Project Manager

cc: Ron Joyner, NAS Pensacola  
Jay Bassett, USEPA Region IV  
Henry Beiro/Brian Caldwell, EnSafe, Pensacola  
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TJB



JJC



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