

Department of Environmental Protection

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Governor

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Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

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NAS PENSACOLA
5090.3a

February 19, 1996

CERTIFIED 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: Technical Memorandum, Site 1 Interim Feasibility Study
Assessment, NAS Pensacola

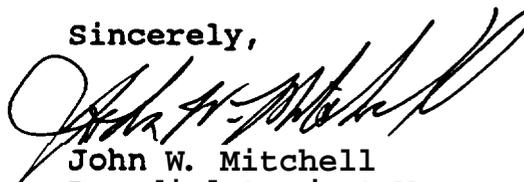
Dear Mr. Hill:

I have completed the technical review of the above referenced technical memorandum dated December 22, 1995 (received December 26, 1995). The feasibility study should incorporate the comments in the attached memorandum from Greg Brown and my comments which follow.

1. In reference to Mr. Brown's comment #5, Table 2 (Preliminary Contaminant Remediation Goals for Groundwater) should indicate all of the constituent PRGs as ARARs. Also, the PRG for arsenic should be 50 $\mu\text{g/L}$ and shown as a Primary MCL.
2. Also, referring to Mr. Brown's Comment No. 5, I recommend removing the phrase on Page 7, "may be attributed to natural geologic and hydrogeologic conditions."

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

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cc: Ron Joyner, NAS Pensacola
Jay Bassett, USEPA Region IV
Henry Beiro/Brian Caldwell, EnSafe, Pensacola
Allison Dennen, EnSafe, Memphis
Steve Cowan, Bechtel, Knoxville
Tom Moody, FDEP Northwest District
Pat Kingcade, OGC/Trustee File

TJB B JJC JJC ESN ESN

Memorandum

Florida Department of Environmental Protection

TO: John Mitchell, Remedial Project Manager, Technical Review Section

THROUGH: Tim Bahr, P.G., Supervisor, Technical Review Section ^B

FROM: Greg Brown, P.E., Professional Engineer II, ^{JB}
Technical Review Section

DATE: February 12, 1996

SUBJECT: Technical Memorandum, Site 1 Interim Feasibility Study Assessment; NAS Pensacola, Florida

I reviewed the subject document dated December '22, 1995 (received December 26, 1995). I have the following comments:

1. Page 1, paragraph 1, says that ". . .[ARARs] have been considered where appropriate." Does this imply that ARAR waivers will be requested when the Navy believes ARARs are not appropriate? It was not obvious in the Technical Memorandum where the Navy believes ARARs do not apply.
2. Page 2, paragraph 2, describes shallow and intermediate wells. It would be useful to include the defining depths for this classification in the text (for "deep" wells, too). For example, shallow wells might be described as "water table wells" having "screened intervals between 5 and 15 feet bgs," etc., as appropriate.
3. A brief synopsis of groundwater conditions at the site would be useful for readers without source materials. A short paragraph describing basic aquifer structures, permeability, gradients, and flow directions would be practical and would help support the document's recommendations.
4. Secondary MCLs and Florida Groundwater Guidance Concentrations meet the criteria for ARARs and are not TBCs. The Navy should review again, and whenever necessary, the memorandum from Mr. David Clowes, dated October 5, 1994, for details on the statutory basis of the Florida primary standards, secondary standards, and minimum criteria.
5. Page 7, paragraph 2, states that inorganic chemicals at the site may be due to natural geologic and hydrogeologic conditions. Are there legitimate background data available to substantiate this claim? If so, then these inorganic chemicals should be screened out as COCs in the RI and BRA.

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6. Page 10, paragraph 2, discusses hotspots and the limitations of the RI sampling design to distinguish them. The last sentence of this paragraph also states "[i]t is questionable whether any reduction in risk would be achieved by removing material from Site 1." Is the purpose of this discussion to discount the usefulness of off-site removal of material or "removal actions" in general? I agree in principle if the former, but not if the latter. Once hotspots are identified, risk reduction strategies (other than off-site removal of material) may be possible as "removal actions."
7. Table 4 presents a limited range of technologies that the Navy claims are most feasible. I suggest that the Navy also consider active groundwater in-situ treatment technologies in addition to natural attenuation, particularly for any source areas they may identify. Also, the Navy is correct in noting that "in-depth modeling and evaluation . . . to determine feasibility" and "aggressive sampling and analysis" are necessary with the natural attenuation alternative. The FS should provide sufficient analysis to be able to confidently determine the feasibility of the natural attenuation alternative.
8. One or more alternatives should be added in response to item 7, above, unless the Navy can convincingly rationalize away active groundwater in-situ treatment technologies.

If you have any questions, please call me at (904) 488-3335.