

Department of
Environmental Protection,

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Lawton Chiles
Governor

Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

June 4, 1997

N00204.AR.001410
NAS PENSACOLA
5090.3a

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: Draft Focused Feasibility Study for Site 2, NAS Pensacola

Dear Mr. Hill:

I have completed the technical review of the above referenced document dated April 9, 1997 (received April 29, 1997) and provide the following comments. Also, please address the comments in the attached memorandum from Greg Brown, P.E.

1. In the first paragraph of Section 1.2.1 (Nature and Extent of Contamination) on page 1-4 remove the reference to exceedences of background concentrations for "organic constituents, polyaromatic hydrocarbons (PAHs), and pesticides." These are anthropogenic compounds which do not have background values.

Also, the last sentence of the last paragraph of this section states, "based on contaminant distribution, the final RI report indicates five locations where constituent concentrations exceed sediment screening values (SSVs)." There were more than five locations which exceeded the SSVs. However, there were five bioassay locations out of ten which had an HI > 10 and showed toxic effects to fish and to benthic macroinvertebrates.

2. In Section 1.2.2 (Contaminant Fate and Transport) on page 1-5, the various potential sources which likely contributed to the sediment contamination should also include historic discharges from the entire Naval Depot industrial complex prior to the installation of the industrial waste water sewer line in 1973.

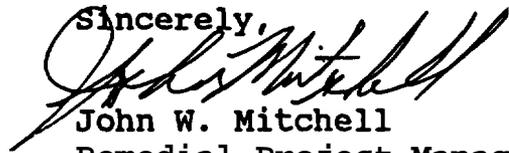
3. In the first paragraph of Section 1.3.1 (RI Assessment) on page 1-6, refers to five "hot spots" where contaminant concentrations exceed SSVs. The paragraph should indicate that these were the five bioassay stations for which toxicity was found to occur. The area of contamination which poses risks is larger than just these locations. The area of concern encompasses the locations where there was an HI > 10 as depicted on Figure 10-11 of the RI report.
4. In Section 1.3.2 (Baseline Risk Assessment) under the subsection Ecological Risk Assessment on page 1-8, it states that "the BRA determined five stations to have an HI above 10 and thus negative impacts represent only 3.9% of the total area under investigation at Site 2." This is incorrect. There were five bioassay stations which showed toxic effects to fish and benthic macroinvertebrates and had HIs > 10. Based on Figure 10-11 (Phase IIB HI Values for Contaminant Concentrations) of the RI report, there were more than these 5 stations which exceeded an HI of 10. The bioassays were performed at various locations at the site to better determine the level of ecological risk to base our risk management decisions. Based upon the results of the RI, apparent risk is greatest where the HI exceeds 10. Therefore, the area of focus for the feasibility study is at an HI > 10 and is shown in the above mentioned figure.
5. In Section 1.3.5 (Remedial Objectives) on page 1-11, the remedial objectives are based on the five "hot spots." The remedial objective is based on the area where the HI is greater than 10. This needs to be reflected in the text and in Table 1-2 of this section. Also, Figure 1-2 should also reflect the same area as defined in Figure 10-11 of the RI report where the HI > 10.
6. In Section 3.2.1 (No Action), under subsection Overall Protection of Human Health and the Environment on page 3-10, delete the last sentence about natural capping of the hot spots through deposition from wave action. There is no proven evidence that this is true. Also, due to the length of time that the industrial outfalls were closed and the contamination continues to exist, the natural capping scenario seems unlikely.
7. In Section 3.2.4 (Natural Attenuation), under subsection Compliance with ARARs on page 3-19, it states that "sediment would be expected to reach remedial goals with time through natural processes." This section needs to indicate the estimated amount of time which would be required. This information is needed to adequately make a risk management decision, as well as determine long term costs. Also, the amount of time (24 years) this contamination appears to have been entrained in the sediments seems to indicate that

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natural attenuation processes are very slow. Although, previous levels may have been much worse and they may have attenuated to their current levels.

- 8. In Section 4.1.1 (Overall Protection of Human Health and the Environment), under subsection Protection of the Environment on page 4-1, this section needs to reflect what I have stated in previous comments Nos. 4 and 5.

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
 Gena Townsend, USEPA Region IV
 Henry Beiro, EnSafe, Pensacola
 Brian Caldwell, EnSafe, Knoxville
 Allison Dennen, EnSafe, Memphis
 Karen Atchley, Bechtel, Knoxville
 Denise Klimas, NOAA Region IV CRC
 Tom Moody, FDEP Northwest District
 Pat Kingcade, OGC/Trustee File

TJB B JJC JJC 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

FROM: Greg Brown, P.E., Professional Engineer 11, Technical
Review Section

DATE: May 27, 1997

SUBJECT: Draft Focused Feasibility Study, ^{Site 2} ~~QV2~~; NAS Pensacola,
Florida.

You requested that I review the subject document dated April 9, 1997 (received April 11, 1997). It is adequate for its intent with the exception of the following minor comments:

- 1) Table 1-1 describes the PRGs for the proposed remedial alternatives. It would also be useful to list the range of observed sediment concentrations as well.
- 2) Removing sources of contaminants to sediments is fundamental for the "natural attenuation" alternative to be feasible. Industrial waste discharges and sources of DDT and PCBs have been removed. The sediments, however, are long-term reservoirs for these compounds. Releases of other contaminants such as metals and PAHs may still be occurring via stormwater discharges. Should the "natural attenuation" alternative be seriously considered, the management of stormwater discharges from the "fifty-six sewer and industrial outfalls" should also be addressed. Additionally, a "natural attenuation" alternative requires an adequate monitoring program to document concentration and risk reduction trends for both metals and persistent organic compounds.
- 3) For metal contaminated sediments, the U.S. EPA's National Risk Management Research Laboratory recommends measuring acid volatile sulfides (AVS) and sulfide sequestered metals (SEM). Their research indicates that if the difference between the normal concentrations of SEM and AVS exceeds 5, then there is a high metal toxicity probability. If the difference is much less, then metal toxicity risks may be negligible. The Navy may wish to measure these values to assess metal bioavailability to help justify their preferred alternatives. For further information on analytical methods, I suggest contacting Mr. Fred Bishop at NRMRL at (513)569-7629.

Call me if you have questions.