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FLORIDA DEPARTMENT OF NATURAL RESOURCES

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April 5, 1993

Commanding Officer
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Attn: Ms. Linda Martin, Code 18211
P.O. Box 10068
Charleston, South Carolina 29411-0068

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NAS PENSACOLA
5090.3a

Re: Naval Air Station Pensacola, National Priority List Site

1. Draft Remedial Investigation/Feasibility Study Work Plan for Site 40 - Bayou Grande
2. Draft Remedial Investigation/Feasibility Study Work Plan for Site 41 - NASP Wetlands
3. Draft Remedial Investigation/Feasibility Study Work Plan for Site 42 - Pensacola Bay

Dear Ms. Martin,

We recently reviewed the above referenced documents and offer the following comments:

RI/FS Work Plan for Site 40 - Bayou Grande

Section 2.5 (Ecological Resources)

This section states the average depth of Bayou Grande is 6 feet, while the last sentence on Page 2-1 states the average is 9 feet. Which is correct?

Section 3.1 (Applicable or Relevant and Appropriate Requirements (ARARs))

Although there are no ARARs for sediments, the National Oceanic and Atmospheric Administration's (NOAA) Effects Range Low (ER_L) values for contaminant impact from sediment should be listed as values to be considered (Long and Morgan, 1991).

Section 4.2.5 (Water Clarity)

Water clarity is not always an indicator of water quality. Many wetland habitats have poor water clarity while being of excellent quality for that particular habitat. In a pine forested wetland the acidic tannin levels would discolor the water, yet provide excellent habitat for many species. It is true that in an estuarine environment such as Bayou Grande,

water clarity would be a better indicator. However, some reactions to various contaminants may increase clarity, yet be harmful to the natural habitat.

Along with sediment toxicity, sediment contamination, and water clarity as a *high priority exposure/habitat indicators*, you should also include total suspended solids in the water.

Section 4.5 (Data Use)

The last sentence of this section states "...to understanding the complex nature of processes in the Bay near NASP." In this document, the word Bay needs to be changed to Bayou.

Section 5.2 (Site Characterization)

Under the Surveying and Water Level Measurements portion of this section of the document water level is to be measured at "regular intervals. Please define the interval of measurement. If this is to assist in determining tidal influence, we suggest a 10 minute interval.

In general, the methodology for assessing Bayou Grande should provide adequate information for analysis. However, we do believe additional groundwater and surface water sampling should be established in the areas of the bayou directly adjacent to or down-gradient from known sites (i.e., Sites 1, 11, 30, 32, 33, 35, and 36) .

RI/FS Work Plan for Site 41 - NASP Wetlands

Section 4.2.3 (Abundance, Diversity, and Species Composition of Vegetation - High Priority Response and Exposure/Habitat Indicator)

These factors can be excellent indicators of the health of the wetland as far as the flora are concerned. However, the apparent health of the vegetation does not necessarily provide a true indication of the wetland's health. Flora is often less susceptible to contaminated impacts compared to fauna. One may see a good abundance and diversity of vegetation, but an avoidance of the wetland or an inability to live in the wetland by the fauna would be another indicator of a degraded habitat .

Section 4.2.8 (Classification and Physical Structure of Habitat - High Priority Exposure/Habitat Indicator)

This section states, "Though critical wetland habitats likely exist at NASP, no wide ranging regional coastal investigation beyond the NASP boundaries will be included in the study to correlate NASP observation." If outside observation of similar wetlands will not be performed or used for background, then research through existing literature or through local/state organizations may be helpful in correlating the NASP wetlands to similar wetlands in the Pensacola vicinity.

Section 5.2.1 (Field Sampling)

1. This section states that surface water and sediment/soil sampling will be analyzed using Contract Lab Protocols (CLP). Many CLP detection limits are above the surface water ARARs, and the NOAA sediment ER L values. The detection limits should be lowered to adequately meet these ARARs and to be considered values.

2. On page 5-4, the second paragraph states, "overall wetland health will be typified by generalizing species abundance and diversity." General abundance and diversity of species does not necessarily mean the wetland is healthy. Mutagenic and teratogenic effects may be occurring which would not always be noticeable.

Also on this page, the first sentence of the next to last paragraph should include "diversity and pollution indicator species." Also the soil profiling mentioned should denote soil size and type.

RI/FS Work Plan for Site 42 - Pensacola Bay

Section 3.1 (Applicable or Relevant and Appropriate Requirements (ARARs))

See comments for the RI/FS Work Plan for Site 40 - Bayou Grande.

Section 3.2 (Potential Contaminants and Sources - Southeastern Waterfront)

As Site 2, which is in Pensacola Bay, is being studied separately from Site 42, the same data collected for the Site 2 investigation should match what is being performed for Site

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42 (Pensacola Bay) for comparability purposes.

Section 4.2.5 (Water Clarity)

See comments for the RI/FS Work Plan for Site 40 - Bayou Grande.

Section 5.2 (Task 2 - Site Characterization)

Under the Surveying and Water Level Measurements portion of this section of the document water level is to be measured at "regular intervals." Please define the interval of measurement. If this is to assist in determining tidal influence, we suggest a 10 minute interval.

Section 5.2.2 (Field Sampling)

The length of the sediment sample transects in Pensacola Bay should be doubled due to the larger area which the bay composes, and the fact that most groundwater flow from the NASP is toward the bay. Groundwater seepage from the NASP likely occurs at a further distance from the shore, compared to Bayou Grande. The hydrologic monitoring could be used to give a modeled projection of likely outfall of the groundwater into the bay.

In general, the methodology for assessing Pensacola Bay should provide adequate information for analysis. However, we do believe additional groundwater and surface water sampling should be established in the areas of the bay directly adjacent to or down-gradient from known sites (i.e., Sites 13, 14, 20, 21, 28, 36, 37, and 39).

Thank you for the ability to comment. If you have any questions, please call (904) 488-7454.

Sincerely,



John Mitchell
Project Manager
Office of Policy and Planning

cc: Pamela McVety, FDNR
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