



EnSafe / Allen & Hoshall
a joint venture for profession

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NAS PENSACOLA
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May 27, 1993

U.S. Environmental Protection Agency
Attn: Ms. Allison Drew
345 Courtland Street, N.E.
Atlanta, Georgia 30365

RE: Responses to Florida Department of Environmental Regulation
Comments for ~~Draft~~ Work Plans: Sites 40 and 42, NAS Pensacola,
Contract # N62467-89-D-0318/036

Dear Ms. Drew:

Enclosed please find a copy of the responses to the Florida Department of Environmental Regulation comments for the ~~Work Plans~~ on Sites 40 and 42: Naval Air Station Pensacola in Pensacola, Florida.

If you should have any questions or need any additional information regarding the plans, please do not hesitate to call me.

Sincerely,
EnSafe\Allen & Hoshall


Henry H. Beiro
Task Order Manager

Enclosure
Response to Comments

cc: Linda Martin, SOUTHNAVFACENGCOM

Florida Department of Environmental protection
Review of Draft Work Plan
Remedial Investigation/Feasibility Study
Operable Unit 17; Site 42 Pensacola Bay

Comment 1

Figures 5-1A, B, and C Sampling Locations need better definition. These figures should incorporate sites potentially impacting Pensacola Bay as shown on Figure 3-1. This step should provide a better understanding as to how each site relates to the proposed sampling program.

Response

Agreed. Potential sources of contamination will be presented on Figures 5-1A, B and C.

Comment 2

The Navy proposes to take sediment samples at 500 foot intervals along the waterfront and 300 feet into Pensacola Bay. While a closer spaced sampling interval would have been advisable to lessen the possibility of areal gaps, the proposed sediment sampling interval is acceptable as a step in the right direction to assess the impact of the Facility on the Bay. The Navy might have to fill in any data gaps via additional sampling once validated data is available.

Response

The sampling scheme has been revised into a three-phase approach, as discussed in the meeting of May 12 and 13, 1993. A brief outline of the phases is presented below.

Phase Z

For Pensacola Bay and Bayou Grande during Phase I, transects will be extended 300 feet perpendicular to the shore. Bathymetry will be measured along the length of the transect and sediment samples will be collected at 0 feet (shoreline), 150 feet and 300 feet along the transect. Sediment samples will be submitted for analysis of grain size and total organic carbon.

During Phase I at the NAS Pensacola Wetlands, all listed wetlands and/or potential wetlands as impacted by a corresponding site at NAS Pensacola will be investigated to identify basic biological characteristics of the wetland, to delineate the wetland boundary and to develop a sampling strategy for Phase II, as required. If impact is suspected, a grid will be established across the wetland. Bathymetry will be measured across the wetland,

Responses in bold denote changes
to first draft.

and sediment samples will be collected from selected locations for grain size and total organic carbon analysis.

A technical memorandum will be submitted upon completion of the Phase I activities. The memorandum will detail the results of Phase I sampling and will present the Phase II sampling locations. The technical memorandum will also present the rationale for additional sampling or the rationale for no further investigation.

Phase IIA

Phase IIA consists of collecting sediment and surface water samples for Target Analyte List/Target Compound List (TAL/TCL) analysis using CLP protocol. Phase II sampling locations will be selected based on various criteria, including but not limited to:

- o storm water discharge points,
- areas hydraulically downgradient of other identified potential sources of contamination (PSCs),
- e areas of surface water discharge,
- e areas of high total organic carbon,
- e areas of small grain size (e.g., high clay and silt content),
- o background locations.

One sediment sample will be collected at each of these hot spot locations. The results of the analyses will initially be compared to background conditions. Locations where the detected concentrations in the sediments are greater than twice background will be further compared to the agreed trigger levels. At locations where the detected concentrations exceed the background or trigger levels, three additional sediment samples will be collected for analysis to delineate the extent. Surface water samples will be collected at locations where the detected concentrations in the sediments exceed the background or trigger levels in standing bodies of water (i.e., wetlands) and not in dynamic environments (i.e., Pensacola Bay and Bayou Grande). A technical memorandum will be written upon completion of Phase IIA detailing the analytical results and the comparison to background and the trigger levels. The technical memorandum will also present the rationale and locations for the subsequent Phase IIB sampling or the rationale for no further investigation.

Phase IIB

Phase IIB consists of diversity and toxicity tests of potentially impacted organisms. During this phase of the investigation, a known volume of sediment will be collected. The sample will be submitted to the selected laboratory and the diversity of the organisms within the sediment will be determined.

Toxicity tests will also be performed during this phase. Selected species of organisms will be directly exposed in the laboratory to the site water and sediment. Acute (48 hour) toxicity will be tested on a portion of the selected organisms. Chronic (28 days) tests will be performed on all of the selected organisms.

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A technical memorandum will be written upon completion of **Phase II** detailing the analytical **results**. The technical memorandum **will** also present the rationale and locations for the subsequent **Phase III** sampling or the rationale for no further investigation.

Phase III

Phase III consists of collection of selected **organisms** for studying the bioaccumulation of **contaminants**. **Phase III** tests may be performed **if needed to further** gauge the ecological **impact** of a site. This information must be weighed against **time** and **expense** to determine an agreement for clean up levels.

Comment 3

Explain the rationale of obtaining sediment samples from a depth of 0 to 2 feet. It would seem that in an estuarine environment like **Pensacola Bay**, bottom dwelling **organisms** live in the first foot of the sediment column.

Response

As agreed by all parties during the meeting of May 12 and 13, 1993, sediment samples will be collected from **0 to 6 inches** depth at all locations. **If areas** of significant contamination are encountered, additional samples will be collected from **0.5 to 2** feet.

Comment 4

The Navy proposes to take **surface** water quality samples **at** approximately **3000** foot intervals. It is customary to take **surface water and sediment** samples together; however, given **the** extent of **this** site and the number of sediment samples to be collected, **this step** is impractical. The Navy should be aware that if chemical constituents in sedimentary **matrix** exceed the **ARARs** **at** any of the sampling **points** along the waterfront, then the Department **will** require that a corresponding water quality sample be **obtained at** such sediment sampling point to **ascertain any potential** degradation of Bay water quality.

Response

Surface water samples will be collected at locations **where** the **detected** concentrations in the **sediments exceed** the background or trigger levels in **standing** bodies of water (i.e., wetlands) and not in dynamic environments (i.e., **Pensacola Bay** and Bayou Grande). Please **see** the response to **FDEP** Comment 2 on the Site 42 — **Pensacola Bay work plan**.

Comment 5

The Navy proposes the installation of six **temporary** monitoring wells along the waterfront to determine the potential impact of inland CERCLA sites on the Bay ~~at~~ the groundwater/surface water interface. This is ~~an acceptable course of action;~~ however, it is suggested that the number of temporary monitoring wells be increased in front of the aircraft parking apron to the left of Site 2, in front of ~~Tank~~ No. 354, and between Site 20 and the southern part of Site 14. The ~~addition~~ of **temporary** wells to **these three areas** will provide **better** control on ~~the~~ potential migration of contaminant plumes in groundwater along ~~sectors~~ of ~~the~~ waterfront ~~that~~ have the potential of being impacted by plume migration but do not have monitoring wells ~~proposed~~ along the groundwater/surface water interface.

Response

All PSCs adjacent to the Bay ~~will~~ have adequate groundwater monitoring ~~systems~~ to determine groundwater **discharge quality**. One additional **temporary** ~~monitoring~~ well will be ~~installed~~ in front of Tank No. 354. A temporary monitoring **well** is **currently** proposed for the **area** between Site 20 and the southern part of ~~S i~~ 14.

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to first draft.

Florida Department of Environmental Protection
Review of Draft Work Plan
Remedial Investigation/Feasibility Study
Operable Unit 15: Site 40 Bayou Grande

Comment 1

Figures 5-1A and B Sampling Locations need better definition. These figures should incorporate sites potentially impacting Bayou Grande as shown on Figure 3-1. This step should provide a better understanding as to how each site relates to the proposed sampling program.

Response

Agreed. Potential sources of contamination will be presented on Figures 5-1A and B.

Comment 2

The Navy proposes to take sediment samples at 500 foot intervals along the waterfront and 300 feet into Bayou Grande. While a closer spaced sampling interval would have been advisable to lessen the possibility of areal gaps, the proposed sediment sampling interval is acceptable as a step in the right direction to assess the impact of the Facility on the Bayou.. The Navy might have to fill in any data gaps via additional sampling once validated data is available.

Response

The sampling scheme has been revised into a three-phase approach, as discussed in the meeting of May 12 and 13, 1993. A brief outline of the phases is presented in response to FDEP Comment 2 on the Site 42 — Pensacola Bay work plan.

Comment 3

Explain the rationale of obtaining sediment samples from a depth of 0 to 2 feet. It would seem that in an estuarine environment like Bayou Grande, bottom dwelling organisms live in the first foot of the sediment column.

Response

As agreed by all parties during the meeting of May 12 and 13, 1993, sediment samples will be collected from 0 to 6 inches depth at all locations. If areas of significant contamination are encountered, additional samples will be collected from 0.5 to 2 feet.

Responses in bold denote changes
to first draft.

Comment 4

The Navy proposes to take surface water quality samples at approximately 3000 foot intervals. It is customary to take surface water and sediment samples together; however, given the extent of this site and the number of sediment samples to be collected, this step is impractical. The Navy should be aware that if chemical constituents in sedimentary matrix exceed the ARARs at any of the sampling points along the waterfront, then the Department will require that a corresponding water quality sample be obtained at such sediment sampling point to ascertain any potential degradation of Bay water quality.

Response

Surface water samples will be **collected** at locations where the detected concentrations in the sediments exceed the background or trigger levels in standing bodies of water (Le., wetlands) and not in dynamic environments (Le., **Pensacola** Bay and Bayou Grande). Please see the response to FDEP Comment 2 on the Site 42 — **Pensacola** Bay work plan.

Florida Department of **Environmental** Protection
Review of **Draft** Work Plan
Remedial Investigation/Feasibility Study
Site 41 NAS Pensacola

No Comments

**Responses in bold denote changes
to first draft.**