



EnSafe / Allen &
a joint venture for professional

5720 Summer Trees Dr. Suite 8 Memphis, TN 38134
(901) 383-9115 Fax (901) 383-1743

33501:0000103

N00204.AR.000740
NAS PENSACOLA
5090.3a

July 8, 1994

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

Re: **Final** Comprehensive Sampling and Analysis Plan
NAS Pensacola
Contract # N62467-89-D-0318/CTO-036

Dear **Ms.** Humphris:

On behalf of the Navy, EnSafe/Allen & Hoshall is pleased to submit seven copies of the **Final** Comprehensive Sampling and Analysis Plan for the Naval **Air** Station Pensacola in Pensacola, Florida. The Quiescent/Low Flow Sampling Technique has been included in this version of the **CSAP**.

Please let me know if you have any questions or comments regarding the plan.

Sincerely,

EnSafe/Allen & Hoshall



Allison Dennen
Task Order Manager

Enclosures

cc: EnSafe/Allen & Hoshall file
EnSafe/Allen & Hoshall Pensacola file
Bill Hill, SOUTHNAVFACENGCOM — 1 copy
Bill Gates, SOUTHNAVFACENGCOM — 1 copy
Ron Joyner, NASP — 9 copies
Tom Moody, FDEP — 1 copy
John Mitchell, FDEP — 1 copy
Waynon Johnson, NOAA — 1 copy
Lynn Griffin, FDEP — 1 copy

TECHNICAL REVIEW AND COMMENTS
UNITED STATES **ENVIRONMENTAL** PROTECTION AGENCY
COMPREHENSIVE SAMPLING AND ANALYSIS PLAN
NAVAL **AIR** STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA

COMMENT:

1. Pages **3-1** through **3-3**, Section **3.1**

As agreed to **at** the March **29-31, 1994 Partnering Meeting**, the well inventory should be expanded to include the following information for each well: a **list** of the parameters for which reliable analytical results **can be** obtained, given the construction, condition, etc. of the well.

RESPONSE

Agreed. The well inventory **will be** expanded to include a **list** of the parameters for which reliable analytical results can be sampled for given the construction, condition, **etc.** of the monitoring well.

COMMENT:

2. Page **5-1**, Section **5.0**

This section should be revised to **reflect** the decisions made by the Parties at recent **Partnering Meetings** to utilize temporary groundwater sampling methods at some sites. **EPA** also continues to encourage the Navy to use temporary groundwater sampling methods to delineate groundwater contaminant plumes at additional sites where the delineation process could **prove to be** time-consuming and **costly**. Obtaining non-turbid, representative groundwater samples from temporary wells may be more difficult. However, **as stated in EPA's initial comment on this subject**, these problems **can** be largely remedied through the use of appropriate purging techniques and innovative well construction procedures, such **as** the one presented by **EPA** at the March **29-31, 1994 Partnering Meeting**.

RESPONSE

The section has been revised to reflect the decision **to use** temporary groundwater monitoring wells at the **BRAC** sites. The **use** of temporary monitoring wells **will** be evaluated on a site by site **basis** by the **Partnering** team.

COMMENT:

3. Page 8-1, Section 8.0

- A. For clarification purposes, this introductory section should clearly state that: (i) an ecological assessment of some type will be performed for every RI/FS site which is identified at NAS Pensacola (including all terrestrial sites), and (ii) only those portions of Bayou Grande, NASP Wetlands and Pensacola Bay which have the potential to be impacted by an identified RI site shall be investigated during the subject ecological assessments. Please see comment 19B from EPA's initial review of this document for further clarification.
- B. The text should briefly explain why "Wetlands are given high priority when evaluating ecological effects at each site."
- C. "In these cases, the assessment procedure is modified for upland areas only." Section 8 fails to specify exactly which investigatory steps will be performed to complete an ecological assessment for the terrestrial sites (i.e., sites 1-39). The CSAP text must clearly identify the tasks which will be completed in order to achieve this goal.

RESPONSE:

Comment 3A — Those areas of NAS Pensacola which have little or no chances of being impacted, based on analysis of the migratory paths from the RI/FS site, will not be studied as part of an ecological investigation, unless they will be used as a reference area. A statement to this effect will be added in the introduction for further clarification.

However, at least a portion of the Phase I must be conducted at every wetland and specific areas throughout the Bay and the Bayou. If this is not done, it will not be possible to determine which wetlands or other areas should be studied. This can be as simple as viewing these areas in relation to a map of other RI sites and cancelling further study at wetlands or portions of the Bay/Bayou not suspected to be impacted. Those areas that are more likely to be affected may require a site visit or Phase II A analysis. Section 8.1.4 has also been expanded to reflect this.

Comment 3B — Section 8.0 will be clarified explaining that wetlands are given a high priority because they are recognized as a valuable ecological resource and are known for their use as wildlife habitat and spawning areas. They are also beneficial for filtering contaminants and in flood control. Consequently, wetlands are also a likely areas of contaminant migration and deposition.

Comment 3C — The same **tasks**, or phases, in the ecological **risk assessment** procedure is conducted for terrestrial **as well as** aquatic and wetland sites. The variable **is** in the methods. Specific methods for terrestrial **areas** will be expanded in Sections 8.1.3, 8.2.1, and 8.2.2. It **will** also be stated in Section 8.1 that much of the **data** from terrestrial sites through the RIs that have already been conducted will be **used**. Ecological **risk** assessments of upland **sites** should be done concurrently with the RIs,

COMMENT :

4. Page 8-3, Paragraph 4

It is assumed that much more detailed information on reference samples (i.e., locations, number, **types**, will be provided in the RI/FS Work **Plans** and/or SAPs for these OUs.

RESPONSE

Locations for reference sample locations will be stated in the site **specific SAP** written after **Phase I** is completed for Sites **40-42**. It **is** not possible to identify appropriate reference sampling locations until the **nature** of the sites of concern and their reference areas are identified through the **Phase I** portion of the investigation.

COMMENT:

5. Page 8-4, Section 8.1.1

"**This section pertains only to those sites having associated wetlands.**" Presumably "sites" refers to the **terrestrial** sites at **NASP**. Since the **driving** force behind these wetlands investigations is the **terrestrial** sites, the goal of the wetlands investigation could be more clearly stated **as follows**: "**This section pertains only to those wetlands which have potentially been impacted by one of the terrestrial sites at NASP which have been identified as requiring an RI/FS.**"

RESPONSE

Agreed, this statement **will** be added. Reference wetlands **will** be included, also.