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5720 Summer Trees Dr. Suite 8 Memphis, TN 36134
(901) 363-9115 Fax (901) 383-1743

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NAS PENSACOLA
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April 16, 1993

Florida Department of Environmental Regulation
Federal Facilities Coordinator
Attn: Eric Nuzie
Twin Towers Office Building
2600 Stone Road
Tallahassee, Florida 32399-2400

**RE: Final Sampling and Analysis Plans, Category III: Sites 2, 11, 30, and 38,
NAS-Pensacola, Contract # N62467-89-D-0318/058**

Dear Mr. Nuzie:

Enclosed please find two copies of each Final Sampling and Analysis Plan, Remedial Investigation/Feasibility Study, for Category III: Sites 2, 11, 30, and 38 for the Naval Air Station Pensacola in Pensacola, Florida.

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

Sincerely,
EnSafe\Allen & Hoshall

Henry H. Beiro
Task Order Manager

Enclosure
Final Sampling and Analysis Plans

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
REVIEW OF DRAFT RI/FS SAMPLING AND ANALYSIS PLAN
CATEGORY III: SITES 2, 11, 30, 38. NAS PENSACOLA**

GENERAL COMMENTS:

Comment 1:

The Navy proposed to change the RCRA-based Appendix IX analysis requirement to the CERCLA-based "Full Scan: analysis plus the collection of additional information about soil and groundwater physical parameters necessary to prepare the upcoming Feasibility Study. Given the fact that this course of action is being implemented at other NPL listed military facilities in the State of Florida, the proposed change is acceptable.

Response:

Agreed.

Comment 2:

The Navy has changed soil sample intervals from the already approved 0.0-1.0, 1.0-2.5, 2.5-5.0, etc. feet below ground surface to continuous split-spoon sampling from ground surface to the water table (0.0-2.0, 2.0-4.0, etc below ground surface) "to ensure a regular and consistent sampling interval". The Navy should be aware that during the July 14, 1992 RPM meeting, the Navy agreed to sample from 0.0-1.0, 1.0-2.5, etc feet bgs. At that time, **FDER** and EPA presented technical reasons why the 0-1.0 and the 1.0-2.5 feet bgs are perhaps the most important intervals in soil sampling; furthermore, FDER approved the RI/FS Workplans for groups H, I, P, and Q and those workplans were approved based on this change. In addition, page 4-11 of the approved Sampling and Analysis Plan (**SAP**) for Operable Unit 10 indicates that surficial soil samples (0.0-1.0 foot bgs) will be obtained. The Department encourages the Navy to clarify its final position regarding the soil sampling intervals.

Response:

The soil sampling interval will be from 0.0-1.0 foot bgs, 1.0-3.0 feet bgs, 3.0-5.0 feet bgs etc to the water table. The 0.0-1.0 foot interval is necessary for risk assessment purposes. The remaining intervals 1.0-3.0 feet bgs, 3.0-5.0 feet bgs, etc. are required to reduce the risk of cross contamination by allocating one sample interval per 2-foot long split barrel sampler.

Comment 3:

As a result of various discussions between the Navy, **FDER**, and **EPA** the Navy has changed the intermediate and deep monitoring well annular grout materials from bentonite to a Portland cement grout with some percentage of bentonite. This is an acceptable change.

The use of bentonite as exclusive.....

Response:

In accordance with Florida Administrative Code Chapter **40A-3**, neat cement grout is required in all monitoring well installations. Although bentonite grout might provide a better seal in most areas, bentonite grout should be avoided in coastal areas such as NAS Pensacola where concentrations of total dissolved solids in groundwater are high. In addition, the neat cement grout provides additional protection from storm surge (hurricanes).

Comment 4:

The Navy indicates that short pump tests will be conducted at these sites to obtain aquifer properties. This is an acceptable course of action in order to get an initial assessment of aquifer properties; however, there seems to be some confusion The Department expects that longer than eight hour pump tests will be conducted at the majority of Pensacola's sites before proceeding to the implementation of any Feasibility Study and subsequent remediation. The Department encourages the Navy to clarify its position on this issue.

Response:

In accordance with the site-specific **SAPs** and work plans, slug tests will be performed at selected monitoring wells. If groundwater remediation will be required, the results of the slug tests will be used to design the appropriate pumping tests. Full-scale pumping tests (up to **48** hours) will be performed at each site with the objective of evaluating the hydraulic properties of the aquifer and underlying aquitard, the leakage between the two more permeable zones of the Sand and Gravel Aquifer, the radial influence of pumping, and any boundary effects. Pumping tests will continue until the above listed objectives are achieved. The EPA and **FDER** will be kept apprised of the investigation as it progresses, and will be notified prior to conducting full-scale pumping tests. The Navy will take technical responsibility for the design and implementation of these tests. Pumping tests will be performed in accordance with the procedures provided in Section **9.6.2** of the Comprehensive Sampling and Analysis Plan (**CSAP**).