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NAS WHITING FIELD
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LETTER REGARDING INVITATION TO SECOND TECHNICAL REVIEW COMMITTEE
MEETING TO BE HELD 3 APRIL 1990 NAS WHITING FIELD FL
3/5/1990
NAS WHITING FIELD

5090

Ser 18/ *B226D*

05 MAR 1990

Mr. Eric S. Nuzie
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Dear Mr. Nuzie:

Thank you for your recent input to the Final Draft RI/FS Work Plans for NAS Whiting Field. We have reviewed all comments from TRC members, and the Navy response is included as enclosure (1).

Our second TRC meeting is scheduled for 9 a.m. April 3, 1990, in the TRAWING FIVE conference room and April 4, 1990, as necessary. This meeting is being held to discuss the enclosed responses and all TRC concerns regarding the NAS Whiting Field RI/FS project. A meeting agenda is included as enclosure (2).

Decisions will be made regarding the work plans and overall project direction. As such, TRC members should bring additional technical representatives, as necessary, in order to resolve all issues by end of the meeting.

The Navy will proceed to Final RI/FS Work Plans after the above referenced meeting. The Final RI/FS documents are anticipated to be completed by the third week of May.

If you have any questions please call Cindy Black, Environmental Manager, at (904) 623-7181. We look forward to your input at this meeting.

Sincerely,

K. G. JOHNSON
Captain, U.S. Navy
Commanding Officer

Enclosures:

- (1) Florida Department of Environmental Regulation (FDER) Comments
- (2) Meeting Agenda

Copy to (w/o encls):

E. C. Jordan Co. (attn: Tony Allen)
SOUTHDIYNAVFAC (attn: Ted Campbell, code 11515)
Mr. Kirk Lucius, EPA, Atlanta
Cindy Black, NAS Whiting Field



RESPONSE TO COMMENTS
DRAFT FINAL RI/FS WORK PLAN
NAS WHITING FIELD
MILTON, FLORIDA

FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (FDER) COMMENTS

A. Work Plan

No Issue
Comment 1: The plan proposes the use of piezocone penetration test (PCPT) to determine the depth to the water table and to define the groundwater flow parameters. It has been brought to my attention that in other studies this approach was not successful. If the PCPT approach does not work, a backup plan using piezometers or more monitoring wells should be proposed and implemented.

Response: The intent of the PCPT exploration is to define pressure head distribution through the aquifer profile in order to delineate aquitards and zones of confined and unconfined conditions. It is not intended to measure depth to the water table or define, outside of the pressure head distribution, groundwater flux parameters. The information supplied by the PCPT explorations will not be used to define either flow direction or flux.

No Issue
Comment 2: (Sections 1-4), No comments.

Response: No response required.

Comment 3: (Section 5-RI/FS Tasks)

where is NPL Scoring?
Site 2
UST vs CERCLA
TCL scan add wells
grout
de-co
SS vs PVC
Site-Specific Explorations--Site 1 (Northwest Disposal Area)

Since the site received a large variety of wastes over a 22-year period, the monitoring well installed previously was probably not downgradient, and the groundwater flow direction has not been defined, it seems that the recommended tasks should be expanded to include several other times.

On a site as large as Site 1, at least 3 PCPT/in-situ groundwater sampling locations should be included. Sites 17 and 18 are much too far away to provide other than a regional flow direction. The scale on Figure 5-6 makes the site appear much smaller than it really is.

Also, due to the variety of wastes placed in this landfill for so long, more than VOCs should be analyzed for. Most likely, the priority pollutants should be analyzed for.



Response: As stated in the response to Comment 1, the data derived from the PCPT explorations is not intended to determine groundwater flow direction. Regional groundwater flow will be determined from the three existing monitoring wells. This information will be used to site in-situ groundwater sampling points downgradient of each of the three sites. In that the PCPT exploration is done in conjunction with in-situ sampling, the locations of the PCPT explorations are governed by the siting for groundwater sampling, i.e., downgradient of the individual sites.

The selection of a single downgradient sample location is specifically designed to ascertain if a release to groundwater has taken place. The program is not intended to track areal and vertical extent or provide a detailed analytical program to ascertain chemicals of concern. If based upon the results of this initial exploratory program, i.e., a release is suspected, subsequent phases of the project will be used to provide the data requirements to undertake a risk analysis and feasibility study.

The criteria for selecting VOA analysis is in keeping with the intent of the in-situ groundwater sampling and analysis program and that is to ascertain if a release to groundwater has taken place. Halogenated and aromatic compounds tend to be more mobile through the vadose zone than the other constituents of the TCL and are, therefore, most likely to reach the aquifer. Halogenated and aromatic compounds were suspected of being or reported as being disposed or spilled at the sites scheduled for in-situ groundwater sampling in sufficient quantities to allow migration to the aquifer.

Along these lines, if a release is documented, additional work will be undertaken. If such a release is not apparent, it is the Navy's intent to install the necessary number of upgradient and downgradient monitoring wells during Phase II to fully determine if a release to groundwater has occurred. As such, a wider array of parameters will be analyzed for at the newly installed wells during Phase II in order to verify indicator parameter results obtained during Phase I.

The Navy acknowledges and agrees with the FDER's concern regarding the potential release of other TCL constituents from a landfill such as found at Site 1, Northwest Disposal Area. The Navy also acknowledges that a primary concern with landfill leachate is the concentration of metals associated with it. Hence, the Navy will expand its analytical program for landfills by inclusion of the TCL metals in this Phase I program.



Comment 4: (Site 3-Underground Waste Solvent Storage Areas)

Since groundwater flow has not been accurately defined, the new monitoring well and the in-situ groundwater samples should be analyzed for priority pollutants. It would be advisable to analyze the other two monitoring wells for priority pollutants at the same time as the new well.

Response: Due to the uncertainty of both the groundwater flow direction and the existence of a confining to semiconfining clay layer in the upper aquifer zone, the program, as is, is deemed adequate to determine if a release to groundwater has taken place and if it is associated with either the upper aquifer zone or the lower aquifer zone.

The Navy's choice of not sampling the two existing monitoring wells under Phase I is based upon the necessity of obtaining a complete understanding of the extent of contamination in a cost effective manner. A synoptic round of groundwater sampling and analysis will be undertaken during Phase II operations. This will be conducted only after what is anticipated to be sufficient number of monitoring wells have been installed to characterize the extent of contamination.

Comment 5: (Site 4-North AVGAS Tank Sludge Disposal Area)

This site requires additional investigation. Chapter 17-770, FAC, procedures should be followed unless the sludge is a hazardous waste.

Response: The Navy concurs with this statement.

Comment 6: (Site 5-Battery Acid Seepage Pit)

The recommendations appear to be acceptable.

Response: No response required.

Comment 7: (Site 6-South Transformer Oil Disposal Area)

The program appears to be acceptable.

Response: The Navy concurs with this statement.

Comment 8: (Site 7-South AVGAS Tank Sludge Disposal Area)

See Site 4 comment.

Response: No response required.



Comment 9: (Site 8-AVGAS Fuel Spill Area)

See Site 4 comment.

Response: No response required.

Comment 10: [Sites 9 and 10-Waste Oil Disposal Pit and Southeast Open Disposal Area (A)]

Since the sites are being combined for study and waste fuel with lead was disposed of in Site 9 along with a variety of wastes possibly including transformer oil with PCBs, pesticides, and herbicides, all groundwater samples collected should be analyzed for priority pollutants.

Response: See response to Comment 3 regarding VOA and metals analysis.

Comment 11: (Sites 11, 12, 13, and 14-Southeast Open Disposal Area (B), Tetraethyl lead Disposal Area, Sanitary Landfill, and Short-Term Sanitary Landfill)

Since the sites are being combined for study and the sites contained such a variety of wastes, all groundwater samples collected should be analyzed for the priority pollutants.

Response: See response to Comment 3 regarding VOA and metals analysis.

Comment 12: (Site 15-Southwest Landfill and Site 16-Open Disposal and Burn Area)

A third well, WHF-16-2, is proposed. The well previously installed, WHF-16-1, is installed to 42 feet, although the groundwater table was at 11 feet. The other well previously installed, WHF-15-1, is installed to 72 feet, although the groundwater table was at 27 feet. It is not known at what depths these wells were screened. They may be inadequate to determine the water quality in the shallow aquifer. Additional wells or in-situ sampling may be necessary to define the groundwater flow at different depths since it appears that the present wells are finished in the deeper zone only. Another groundwater sampling location should be established northeast of Site 15. All groundwater samples collected should be analyzed for priority pollutants.

Response: The four proposed in-situ groundwater sampling locations are situated to ascertain release in the upper zone of the aquifer plus provide information on stratigraphy. Data derived during the PCPT/in-situ sampling task will be used to determine what type of additional studies is required.



Comment 13: (Sites 17 and 18-Crash Crew Training Areas)

These sites seem to be rather far apart to be combined. Each site should have at least three wells or groundwater sampling locations around the site. Groundwater samples should be analyzed for volatile organics, base neutrals including the PAHs, and metals.

Response: The use of "study area" in the Work Plan is misleading. The intent of a study area is to be able to share hydrogeologic information to define a larger hydrogeologic unit. It is not intended to lump sites for contamination assessment. This shall be clarified in the Work Plan.

The Navy concurs that the Phase I program is not sufficient to fully characterize the extent and type of groundwater contamination, if any, at either of the Crash Crew Training Areas. This shall be accomplished within any Phase II program for the sites which in turn will be developed based upon the Phase I program results.

B. Sampling and Analysis Plan, Site Management Plan

No comments.

C. Sampling and Analysis Plan, Field Sampling Plan

For comments of the Site-Specific Exploration Section, see the Work plan comments provided for the Site-Specific Explorations Section of the Work Plan.

D. Data Management Plan

No comments.

E. Health and Safety Plan

No comments.

Followup response: It is apparent that there is some confusion concerning the intent of the Phase I program. As stated, most of the proposed field program is designed to provide information on hydrogeology across NAS Whiting Field and delineate sites where a release has occurred. Due to too many unknowns regarding hydrogeologic conditions underlying NAS Whiting Field and the expense of 100- to 200-foot monitoring well installation, this conservative approach was warranted to optimize Phase II exploration locations.