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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 WITH ATTACHED COMMENTS AND AGENDA NAS  
WHITING FIELD FL  
3/5/1990  
NAS WHITING FIELD

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05 MAR 1990

Ms. Nancy Dean  
Remedial Project Manager  
U.S. Environmental Protection Agency, Region IV  
345 Courtland Street  
Atlanta, GA 30365

Dear Ms. Dean:

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)  
SOUTHDIVNAVFAC (attn: Ted Campbell, code 11515)  
Mr. Kirk Lucius, EPA, Atlanta  
Cindy Black, NAS Whiting Field



U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA) COMMENTS

A. RI/FS Work Plan

Comment 1: Page 4, Section 1.2

*No*  
If Whiting Field is placed on the NPL, RODs must be done for any sites requiring long-term monitoring. Long-term monitoring is not considered No Further Action by the Agency.

Response: So noted. Paragraph shall be modified.

Comment 2: Page 40, Section 2.4.1

*no historical info  
no evidence of  
any sludges  
from  
mistake that  
will be taken care of*  
Since Site 2 is listed on Table 2-15 and mentioned in the text as not being recommended for further study, EPA recommends sufficient cause for such determination also be provided in the Work Plan. The Work Plan is after all a public document. Also sludges are not petroleum products and can be covered under CERCLA. Do not eliminate these sites from consideration.

Response: Additional information shall be provided in the Work Plan which will support the Navy's position of no further action at Site 2.

Comment 3: Page 42, Section 3.0

*No*  
Use the following EPA guidance in doing Risk Assessments at Whiting Field:

- Superfund Public Health Evaluation Manual (June 1989)
- Risk Assessment Guidance for Superfund-Environmental Evaluation Manual (March 1989)

Response: The Navy concurs with this statement.

The Work Plan for the ecological risk assessment at Whiting Field was written according to the Environmental Evaluation Manual.

Comment 4: Page 49, Section 3.1.1.5

*No*  
Federal Drinking Water Standards apply if Florida's are less stringent. The following are Federal MCLs proposed in August 1988:

- Lead - 5 ppb
- Lindane - 0.2 ppb

Response: Currently, the State of Florida has primacy under Section 1413 of the Safe Drinking Water Act. As such, the State of Florida has adopted MCLs that are no less stringent than those promulgated by



USEPA. The two listed Federal MCLs are currently under "proposed" status. The Navy recognizes that new levels may become effective during the course of the RI/FS for NAS Whiting Field and will adjust accordingly.

*No Issue*  
Comment 5: Table 3-7

*The Safe Drinking Water Act does not contain MCLs. They are specified in the National Primary Drinking Water Regulations.*

Response: The statement in Table 3-7 agrees with this fact.

*No Issue*  
Comment 6: Pages 79-82, Table 3-12

"Samples should be at a minimum analyzed for the Target Compound List."

Response: Table 3-12 "Data required to evaluate remedial technologies" will be modified to demonstrate this fact.

*No Issue*  
Comment 7: Page 87, Section 5.3

*Prior to implementation of Phase II, the Work Plan must be amended for Phase II and reviewed and approved by EPA.*

Response: The Navy concurs with this statement.

*No Issue*  
Comment 8: Page 87, Section 5.3.1

*It is unclear from your discussions if the upper or lower portion of the lower zone aquifer will be monitored. Please clarify.*

Response: Under the Phase I program, an in-situ groundwater sample will be obtained from the lower part of the lower aquifer zone, just above the Pensacola clay confining unit.

*No Issue*  
Comment 9: Page 91, Section 5.3.1.2

*EPA doesn't use or accept laboratory permeability data as field conditions. EPA requires field data. Either an adequate number of slug tests to establish variability or pump tests, must be performed.*

Response: As discussed in Section 5.3.1.5 of the Work Plan, both slug tests and a pump test are scheduled at NAS Whiting Field. However, the intent of the laboratory permeability tests is to approximate the vertical hydraulic conductivity through the upper aquifer zone clay layer, not the aquifer.



*No Issue*  
Comment 10: Page 91, Section 5.3.1.2

*PVC should be used only for monitoring wells constructed for screening purposes. Suitability of these wells for future use in accurately quantifying waste constituents will have to be evaluated on a case-by-case basis and some data may not be accepted by EPA if the well is believed to be comprised due to its construction material.*

Response: The Navy recognizes the fact that an adverse environment may compromise the integrity of PVC well screen. However, data collected to date suggest that such conditions do not appear to be present in the aquifer underlying NAS Whiting Field. As stated in the Sampling and Analysis Plan (p. 64), long-term monitoring well construction material will be stainless steel, as appropriate.

*No Issue*  
Comment 11: Page 91, Section 5.3.1.2

*Bentonite pellets should be tremied in order to prevent bridging. Surface pads should be 3 feet by 3 feet by 4 inches in size and sloped to promote runoff away from the well.*

Response: The Navy does not agree with the need to tremie bentonite pellets in wells at the proposed depths. Past experience has shown this method to be ineffective (e.g., bridging within tremie pipe) or excessively time consuming.

Navy specifications for the surface pad are presented in Volume II, Appendix C, and are consistent with the USEPA's recommendation.

*No Issue*  
Comment 12: Pages 92-93, Figures 5-2 and 5-3

*Why is a bentonite pellet seal not proposed for the double-cased well? A seal keeps cement out of your sand pack and consequent contamination.*

Response: The placement of bentonite pellets in 200-foot wells is very difficult. The 2-foot bridge of sand pack between the screen openings and the cement/bentonite grout mixture has been found sufficient to prevent contamination within the well from the grout, principally with regard to pH and aluminum.

Comment 13: Page 94, Section 5.3.1

*Table 3-1 shows contamination already present in the lower aquifer zone, so even if confined conditions exist, it is obviously no barrier to contaminant migration. Please note this if you intend to make this type of argument in the future.*

Response: Comment needs clarification.



Comment 14: Page 97, Section 5.3.1.3

*Why are only VOCs being analyzed for in-situ sampling?*

Response: As discussed in the response to Comment 3 of the Florida Department of Environmental Regulation, the VOCs are used as indicator parameters as part of the Phase I activities. Additional parameters will be analyzed during Phase II. Additional details are provided in the response to Comment 3 of the FDER.

Comment 15: Page 98, Section 5.3.1.5

*WHF-5-5 and WHF-5-6 are not marked on Figure 5-4 as indicated in the text. Please include these locations. How were recovery times of 4 days and a pump test length of 14 days determined?*

Response: Text should read "...monitoring well WHF-5-1, observation wells WHF-5-OW-1 and WHF-5-OW-2, and piezometers..." Observation wells are located on Figure 5-4.

The schedule for the pump test is based upon historical operation of the three production wells on the installation.

Comment 16: Page 99, Section 5.3.1.5

*Models need to be field verified.*

Response: The Navy concurs with this statement.

Comment 17: Page 111, Figure 5-8

*CPT explorations are not marked on the map. Please indicate where they will be placed.*

Response: Figure 5-9 shows PCPT exploration locations as referenced in the text (page 114).

Comment 18: Page 123, Section 5.3.3.6

*EP toxicity is a test which is meant only to determine whether a solid waste is a characteristic waste under RCRA. The test has no bearing on whether a substance is hazardous. Sludge is not petroleum and is therefore not exempted from CERCLA. This site should be included in the Work Plan.*

Response: The EP toxicity test is important with regard to final disposition of the soil and sludge. Results for total lead content are also summarized in this section which do give an indication of whether or not the soil or sludge is hazardous.



The Navy's intent in placing both Sites 4 and 7 into the Underground Storage Tank (UST) Program was previously discussed with both the FDER and the USEPA (May 1989 phone conversation between Ms. Nancy Dean, USEPA, and Mr. Ted Campbell, Southern Division, and a June 2, 1989, Navy followup letter to the USEPA and the FDER). As stated during those discussions, both sites are slated for work to comply with Rule 77-770, Florida Administrative Code, and, as such, inclusion of the sludge question into the Navy's UST program will accomplish two things. First, it will bring about a more timely, efficient, and effective remediation, if required, of the sites in toto. And second, it would place both sites under a single program, which will also bring about a more efficient and cost effective remediation of the two sites.

Comment 19: Page 133, Section 5.3.3.9

*There is no need to separate these sites out. They could be considered one operable unit and if Whiting Field is placed on the NPL a single ROD could be written. It is not necessary to single out each individual site for a separate action.*

Response: It would appear to be premature to combine the four sites into one operable unit. There is insufficient evidence to determine if any or all of the sites have impacted the environment. Until clarification of this point, the Navy plans, at this time, to treat each site as a separate operable unit.

Comment 20: Page 142, Section 5.3.3.9

*At most of the sites at Whiting Field, the source area is not being characterized. Is it fully understood what wastes were disposed at each site and the volume of that waste, so that there is adequate information if the source itself needs remediation?*

Response: As stated in Section 5.3.5.4 of the Work Plan, source area delineation and characterization is a Phase II operation and dependent upon the determination that a release to the environment has taken place and where. This release will be ascertained during either the Phase I or Phase II program.

Comment 21: Page 154, Section 5.3.4

*It is a good idea to separate out facility wide groundwater contamination and surface water/sediment contamination. These can be addressed as separate operable units if RODs are required in the future.*

Response: The Navy concurs with the statement.



Comment 22: Page 156, Figure 5-21

*Why are no samples being taken from the ditches which feed into Coldwater and Clear Creeks? Why is Clear Creek not being sampled downstream of the two southernmost ditches draining Whiting Field?*

Response: The sampling scheme, as presented, is sufficient to indicate if surface runoff or sediment transport have impacted Coldwater and Clear Creeks. Sampling the drainage ditches, if required, will be implemented during the Phase II program.

No sampling is proposed downstream of the two southernmost drainage ways in that they do not carry discharge from any of the listed sites.

Comment 23: Page 162, Section 5.3.5.1

*Once the groundwater direction is determined and contaminants of concern and their degradation products determined, monitoring wells may need to be placed to delineate any possible offsite contaminant migration. If contaminants have moved offbase then domestic wells will need to not only be identified but sampled as well.*

Response: The Navy concurs with this statement.

Comment 24: Page 166, Section 5.3.5.2

*Well construction is not consistent with the Sampling and Analysis Plan. Bentonite seals are missing. Long-term monitoring wells need protective measures in heavy traffic or mowed areas.*

Response: Regarding well construction, the last paragraph of page 64 of the Sampling and Analysis Plan (Volume II of III) is consistent with and directly parallels that on page 166 of the Work Plan (Volume I of III).

With regard to the bentonite seal, see the response to USEPA's Comment 12.

With regard to protective measures around wells in heavy traffic areas, this is standard Navy practice.

Comment 25: Page 167, Section 5.3.5.4

*Instead of drilling through a landfill, a backhoe could be used.*

Response: The scope of this Work Plan does not include drilling or backhoe explorations within the boundary or any landfills at NAS Whiting Field.



Comment 26: Page 172, Section 5.6.2.2

*EPA suggests presenting in table form information for the selection of contaminants of concern. The following should be included: all detections of contaminants, the frequency of "hits," the mean concentration, the maximum concentration, and the 95% confidence limit level. The rationale for eliminating chemicals from the indicator chemical list should be included in the table.*

Response: The Navy shall follow current USEPA guidance when establishing contaminants of concern.

Comment 27: Page 173

*When identifying health-based numbers, as part of the ARARs discussion, EPA's Integrated Risk Information System (IRIS) should be the primary source of information. The reference doses and cancer potency factors in IRIS are continually updated as new information becomes available. Thus, IRIS should be rechecked as closely as possible to the time of submissions of any risk assessment document and the risk calculations adjusted accordingly.*

Response: The Navy concurs with this statement.

Comment 28: Page 192, Figure 6-2

*EPA's national policy is to complete the RI/FS in 18 to 24 months. The twenty-nine (29) months until the final report is submitted in breaking with this national policy. However, Whiting Field is not on the NPL nor is there a Federal Facility Agreement in place. Therefore, an operation schedule for the facility is at the Navy's discretion.*

Response: The projected 29 months is the anticipated length of the project. Anticipated report dates are at 17 months for the RI and 25 months for the FS.

#### Sampling and Analysis Plan

Comment 29: Page 43, Section 3.1.12

*EPA recommends that calibrations be performed for all appropriate instruments at the end of each day to document that each instrument continued to function properly throughout the day. This also provides personnel adequate time to make repairs or adjustments, as necessary to the equipment before the next time it is used.*

Response: The Navy concurs with this statement.



Comment 30: Page 65, Section 3.4.6

Procedures for well development should include: (1) waiting time between grout placement and development, (2) special precautions for the particular method that might be chosen, and (3) criteria for determining when development is complete.

Response: Noted and details shall be included in the document.

Comment 31: Page 24, Section 6.3, Appendix B

The decontamination procedures specified for sampling and drilling equipment are not adequate. The following procedure should be used to clean all sample contacting equipment, including drill rod, auger flights, split spoons, hand augers, etc.

1. Clean with tap water and laboratory grade detergent, using a brush if necessary, to remove particulate matter and surface films. Steam cleaning may be necessary to remove matter that is difficult to remove with a brush. If the contamination consists of stubborn oils or tarry organics, it may be necessary to pre-clean with a strong solvent, such as acetone or hexane, prior to the detergent wash step.
2. Rinse thoroughly with tap water.
3. Rinse thoroughly with deionized water.
4. Rinse twice with solvent (pesticide-grade isopropanol).
5. Rinse thoroughly with organic-free water and allow to air dry as long as possible. If organic-free water is not available, allow the equipment to air dry as long as possible. Do not rinse with deionized or distilled water.

NOTE: Organic free water can be processed onsite by purchasing or leasing a mobile deionization organic filtration system.

NOTE: Tap water may be applied with a pump sprayer, All other decontamination liquids (D.I. water, organic-free water, and solvents), however, must be applied using non-interfering containers. These containers will be made of glass, Teflon, or stainless steel. No plastic containers or pump sprayers are allowed.

NOTE: Well casing and screen, as well as tremie pipe, shall be cleaned according to these procedures. Prior to cleaning, however, it may be necessary to sand off printing inks, if present, on these materials. If any of these materials are of PVC construction, the solvent rinse step should be omitted.



6. *Wrap with aluminum foil, if appropriate, to prevent contamination if equipment is going to be stored or transported. Clean plastic can be used to wrap augers, drill rods, casings, etc., if they have been air dried.*
7. *As previously stated, all downhole augering, drilling, and sampling equipment shall be sandblasted before Step #1 if there is a buildup of rust, hard or caked matter, and/or painted equipment. All sandblasting shall be performed prior to arrival onsite.*

Response: Decontamination procedures as presented in the QAPP comply with current Navy requirements. Further requirements are to be assessed on a case by case basis during field operations.

Comment 32: *Page 31, Section 6.6.2*

*After removal of the VOA sample, the remaining soil should be thoroughly mixed before the other containers are filled.*

Response: The Navy concurs with this statement.

Comment 33: *Page 40, Section 6.6.3*

*EPA finds mixing on plastic or butcher paper unacceptable. A large, properly decontaminated glass pan should be used.*

Response: The Navy concurs with this statement.

Comment 34: *Page 49, Section 6.7.2.1*

*EPA recommends washing the indicator probe and wetted portion of the cord with laboratory grade detergent and rinsing with D.I water between wells. Stubborn films may require brushing during the detergent washing step.*

Response: For routine situations the procedures as presented in the QAPP has been proven to be adequate. More stringent decontamination procedures are required with wells containing severely contaminated groundwater. With this situation acid rinse, acetone rinse, etc., may be required.

Comment 35: *Page 49, Section 6.7.2.2*

*USEPA recommends that all wells be purged and sampled by pumping or bailing from the top of the water column. If dense, immiscible phases are known or suspected, additional sampling should be conducted from the lower portion of the screened portion of the well to better characterize or quantify those constituents.*



Response: The Navy concurs with this statement.

Comment 36: *Section 6.*

*See enclosed memo from EPA Region IV Environmental Services Division.*

Response: The Navy concurs with this memorandum.

Comment 37: *Section 6, Figure 6-6*

*Region IV policy is not to filter samples for metals analyses.*

Response: The Navy concurs with this statement.