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NAS WHITING FIELD
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LETTER REGARDING U S EPA REGION IV COMMENTS ON DRAFT REMEDIAL
INVESTIGATION WORK PLAN NAS WHITING FIELD FL
12/28/1989
U S EPA REGION IV



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

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DEC 29 1989

4WD-SISB

Mr. Ted Campbell
Southern Division
NAVFAC-ENGC
2155 Eagle Drive
P.O. Box 10068
Mailcode 11515
Charleston, S.C. 29411-0068

Re: EPA comments on the Draft RI/FS Work Plan for NAS Whiting Field, Milton, FL

Dear Mr. Campbell,

EPA has reviewed three (3) volumes submitted as an RI/FS Work Plan and which includes the Sampling and Analysis Plan and Health and Safety Plan. We have the following comments on these plans:

RI/FS Work Plan

1. Page 4, Section 1.2, 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.
2. Page 40, Section 2.4.1, Since Site 2 is listed in 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.
3. Page 42, Section 3.0, 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).
4. Page 49, Section 3.1.1.5, Federal Drinking Water Standards apply if Florida's are less stringent. The following are Federal MCLs proposed in August 1988.

Lead - 5ppb
Lindane - 0.2 ppb

5. Table 3-7, The Safe Drinking Water Act does not contain MCLs. They are specified in the National Primary Drinking Water Regulations.

6. Pages 79-82, Table 3-12, Samples should be at a minimum analyzed for the Target Compound List.

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.

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.

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.

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 compromised due to its construction material.

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 run-off away from the well.

12. Page 92-93, Table 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.

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.

14. Page 97, Section 5.3.1.3, Why are only VOCs being analyzed for in-situ sampling?

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 four days and a pump test length of fourteen days determined.

16. Page 99, Section 5.3.1.5, Models need to be field verified.
17. Page 111, Figure 5-8, CPT explorations are not marked on the map. Please indicate where they will be placed.
18. Page 123. Section 5.3.3.6, EPA 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 therefor not exempted from CERCLA. This site should be included in the Work Plan.
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.
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.
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.
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?
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.
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.
25. Page 167, Section 5.3.5.4, Instead of drilling through a landfill, a backhoe could be used.

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: 1) 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.

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 submission of any risk assessment document and the risk calculations adjusted accordingly.

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 a final report is submitted to EPA is 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.

Sampling and Analysis Plan

29. Page 43, Section 3.1.12, Appendix A, 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.

30. Page 65, Section 3.4.6, Appendix A, 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.

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 consist 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 on site 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 on site.
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.
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.

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.

35. Page 49, Section 6.7.2.2, EPA 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.

36. Section 6, See enclosed memo from EPA Region IV Environmental Services Division.

37. Section 6, Figure 6-6, Region IV policy is not to filter samples for metals analyses.

If EPA can be of further assistance, please contact Ms. Nancy Dean at (404) 347-5059.

Sincerely yours,



for
H. Kirk Lucius, Chief
Site Investigation and Support Branch
Waste Management Division

cc: Eric Nuzie, FDER



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

ENVIRONMENTAL SERVICES DIVISION
ATHENS, GEORGIA 30613

MEMORANDUM

DATE: AUG 29 1989

SUBJECT: Samples Collected for Purgeable (Volatile) Organic Compound Analyses (VOA's)

FROM: M. D. Lair, Chief
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

TO: Addressees

There have been a number of memos during the past year regarding the collection of samples for purgeable organic compound (VOA) analyses. The purpose of this memo is to consolidate the information already presented and to clarify changes in the Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual, April 1, 1986 (ESBSOPQAM).

ALL WATERS

All water and wastewater samples collected for VOA analyses in Region IV are to be preserved with 4 drops of 1:1 hydrochloric acid per 40 ml VOA vial. Preserved water VOA samples have a holding time of 14 days; unpreserved VOA samples have a seven (7) day holding time. (This policy does not apply to concentrated waste samples. Concentrated waste samples are never preserved). Unpreserved VOA samples can only be submitted to the ESD laboratory by special request to the Analytical Support Branch well in advance of the field investigation. If unpreserved VOA samples are sent to the CLP, a special analytical request (SAS) for quick turn-around analysis will be required. Samples for VOA analyses will be collected in triplicate for all water and wastewater samples submitted to the ESD laboratory in Athens, GA. Duplicate samples will be submitted to CLP laboratories.

Samples collected from water supplies or wastewaters that have been chlorinated must be dechlorinated. The procedure for dechlorinating water and wastewater VOA samples is to use ascorbic acid. Please note that sodium thiosulfate is no longer used to dechlorinate samples for VOA analyses. (However, sodium thiosulfate is still used to dechlorinate samples for extractable organic compound analyses.) We are adding 4 drops of a 25 percent ascorbic acid solution per 120 ml soil VOA container for dechlorination purposes. (Note: you will need two 120 ml containers in order to obtain enough volume to fill three VOA containers). Please contact Tom Bennett at 404-546-3112 or Frank Allen at 404-546-3638 if you have any question regarding this procedure.

Extreme care must be taken with the handling of water VOA containers. We suggest that these containers be stored open in a drying oven set at a minimum of 105°F for at least 24 hours prior to use or at 150°F for one (1) hour if overnight storage is not possible. The caps and septa should also be baked for the same length of time. Ideally, the bottles should only be removed from the oven shortly before the preservative is to be added. After the preservative is added, the sample containers should be stored in a contaminant free area prior to use. They should not be stored in a field vehicle over the weekend. If the prepared sample containers are not used within one week, they should be recleaned or discarded. Be sure that the trip blanks are prepared and that these trip blanks are taken on every field investigation where samples for purgeable organic compound analyses are collected. The analytical results from these field blanks should be carefully monitored to ensure that samples or sample containers are not being contaminated.

SOIL SEDIMENT

Soil/Sediment samples for purgeable organic compound analysis should be collected on a grab basis only. These samples will not be mixed in any way and will be transferred from the sample collection device to the sample container with as little disturbance as possible. The standard sample container will be an unpreserved 40 ml water VOA or a 60 or 120 ml septum sealed soil VOA container. A 120 ml septum sealed soil VOA container is available from both I-Chem and Eagle Pitcher. Either container is acceptable and either one may be used for soil/sediment samples submitted to ESD or the CLP for VOA analyses. Only one of either container need to be submitted per sample to the CLP or ESD laboratory. We suggest that the soil VOA containers and septa be stored in the same manner as the water VOA containers. All precautions listed for the water VOA containers apply to the soil VOA containers.

GENERAL

Many years ago we started using black electrical tape to secure the tops of small sample containers, such as the VOA containers, to prevent them from coming off during transport. We have never had any indication that this practice caused any sample contamination; however, this practice does not appear to be of any significant value. Therefore, effective immediately, the standard operating procedure for Region IV ESD will be to not tape sample containers. Do not submit any sample containers to the ESD laboratory that have the closures taped. I trust that this memorandum clears up any confusion regarding the collection of samples for purgeable (volatile) organic compound analyses. Please distribute this memorandum to your staff, contractors and subcontractors. Should you have any questions, please feel free to contact me at 546-3300.

Addressees:

- | | | |
|----------------------|-----------------------|-----------------------------|
| Finger/Patton, ESD | John Marlar, WMD | REM III |
| Bennett/Carroll, ESD | Jim Kutzman, WMD | REM V |
| Mike Carter, ESD | Robert McGhee, WMD | ARCS-CDM |
| Delbert Hicks, ESD | Dick Green, SB, WD | ARCS-EBASOC |
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| TRE (TMM & Dynamac) | TAT | ARCS-Bechtel |