DEPARTMENT OF THE NAVY
SOUTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
2155 EAGLE DR., P. O. BOX 10068
CHARLESTON, S. C. 29411-0068

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03.01.00.0052

PLEASE ADDRESS REPLY TO THE COMMANDING OFFICER, NOT TO THE SIGNER OF THIS LETTER. REFER TO:

5090
1851/11

JUN 26 1992

N00204.AR.000386
NAS PENSACOLA
5090.3a

CERTIFIED MAIL- RETURN RECEIPT REQUESTED

Ms. Allison Drew
Environmental Protection Agency
Region IV
Waste Management Division
RCRA and Federal Facilities Branch
345 Courtland Street, N.E.
Atlanta, GA 30365

Dear Ms. Drew:

Enclosed for your review are our responses to your comments on the following documents: Revised Generic SMP, Revised PMP, Revised QAPP, and Revised HASP prepared by Ecology and Environment, Inc., and the Draft Phase I Workplan for Group L (screening sites). The revised documents are to be finalized based on your concurrence with our responses and incorporation of your comments. The Draft/Final Phase I workplan for Group L is due 60 days after the receipt of our responses which is August 24, 1992.

Please contact Ms. Linda Martin, Code 1851, at (803) 743-0574, if you should have any questions regarding tbese documents.

Sincerely,

JAMES B. MALONE, JR., P.E.
MANAGER, INSTALLATION
RESTORATION, EAST SECTION

copy to:
NAS Pensacola (Mr. Ron Joyner)
FDER (Mr. Eric Nuzie)

RESPONSES TO COMMENTS FROM
THE U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION IV (EPA)
DRAFT GENERIC PROJECT DOCUMENTS
REVISED DECEMBER 1991
NAVAL AIR STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA

SITE MANAGEMENT PLAN

Comment 1; Page 2-4:
The tvelve criteria listed here are not set forth in the Federal Facilities Agreement (PPA). Please make the appropriate correction to the text.

Response:
The listed criteria are contained on page 7 of the FFA Site Management Plan. The text has been modified to clarify this.

Comment 2; Pages 2-4 through 2-6, Section 2.3 and Table 2-1:
According to Appendix A of the FFA, Sites 19, 20, 21, 23 and 37 have been transferred to the Navy's UST program. Please lake the necessary corrections to the text and table.

Response:
Reference to Sites 19, 20, 21, 23 and 37 has been deleted from the text and table. A note was added to the text indicating that this vas done.

Comment 3; Page 2-7, Figure 2-2:
All sites, excluding Sites 40, 41 and 42, must be identified on this figure. Hissing from the current version are Sites 30, 36 and the UST sites. Also, the size and line quality of this figure must be improved. This should permit clearer identification of all sites, and particularly Site 36.

Response:
Site 30 has been identified on the figure and a separate figure shoving the location of Site 36 has been added to the document. The request to have the sites that have been transferred to the UST program on this map seems contradictory to the EPA's comment no. 2, and it is inappropriate for them to be located on this map, vhich depicts Naval Installation Restoration Program (NIRP) sites. Finally, the quality of the figure will be improved.

Comment *4; Page* 3-5, **Community Relations** Plan:
"The CRP will include a summary *of* public comments on investigative reports and proposed plans, and the Navy's response to those comments." This statement is incorrect. Please either correct of delete.

Response:
This statement has been deleted.

Comment 5; Page 3-6, Paragraph 3; Page 3-7, Figure 3-1:
The phased approach referenced here and illustrated in Figure 3-1 is not acceptable. The work plans must be designed to permit the collection of all information needed to accomplish the stated RI/FS objectives (i.e. confirmation, extent delineation) in a single round of investigation.

Response:
Based on discussions between the EPA and the Navy at the June 16 and 17, 1992, Remedial Project Managers (RPM) meeting, the Navy will continue the investigations using the phased approach. However, as agreed upon at the meeting, every effort will be made to complete the investigation during Phase 11. Any modifications to the work plan required to expedite or redirect the work will be approved by the RPMs and attached to the work plan as addenda.

Comment 6; Page 3-8, Paragraph 1:
Why wasn't a conceptual site model developed and included in the Draft RI/FS work plans that have been submitted to date? This would have aided significantly in assuring that a suitable sampling plan was developed.

Response:
The Navy would like to point out that this is a new comment on previously reviewed and approved material. The development of a conceptual site model requires some knowledge about existing site conditions. Consequently, this type of information is proposed to be collected and evaluated as part of the Phase I activities at a given site. This information will then used to focus the Phase II efforts; thus, even though the Navy does not propose to develop a "conceptual site model" per se for each site, the information collected during Phase I will be utilized for similar purposes.

Comment 7; Page 3-8, Section 3.3.3:
Again, the phased approach described here is not acceptable. Why intentionally divide the work to be done into four phases up front? the work plans must be designed to permit the collection of all information needed to accomplish the stated RI/FS objectives (i.e. confirmation, extent delineation) in a single round of investigation. Additional "phased" should be performed on an as-needed, rather than an as-planned, basis. Please delete these, and all other references, to the proposed 4-phased approach which occur throughout this document.

Response:
See response to EPA comment no. 5 for this document.

Comment 8; Page 3-9, Paragraph 2
"The baseline risk assessment is to the FS risk assessment as the PA/SI is to the RI/FS, that is, it provides a preliminary indication of risk before the FS is conducted to identify cleanup alternatives and priorities." This statement is incorrect. Please modify or delete. Refer to the appropriate USEPA guidance document for an accurate description of the Baseline Risk Assessment.

Response:
This sentence has been deleted and a statement was added to the text that the baseline risk assessment will be conducted according to the appropriate USEPA guidance document for risk assessments.

Comment 9; Page 3-10, Section 3.3.6:
This section indicates that an SI will be conducted only on "new sites identified during the planned RI/RFI/FS work on existing sites." Why not perform an SI on the "22 sites/PSCs being addressed in a screening process..." (p. *2-4)?* The second paragraph of this section references sites for which an already-completed "PA has not identified any contaminants of concern. The SI will be conducted as part of the installation-wide RI/RFI/FS process to provide defensible highly reliable analytical data" (i.e. the type of data needed to support a No further action decision). Uhy not utilize this approach on the already-identified screening sites, which appear to be at an identical point in the data-gathering process? Furthermore, at no point does this SMP fully set forth and explain the approach which will be used to investigate these 22 screening sites. Such a section must be added to the present document.

Response:
Again, this is a new comment on previously reviewed and approved material. An SI-type of investigation will be utilized on screening sites. The physical process by which a screening site will be investigated is no different from a non-screening site through the Phase II investigation. That is, all sites will undergo a Phase I investigation. If significant evidence of contamination is detected on a site, the purpose of the Phase II investigation will be to fully characterize and delineate the extent of this contamination. If the Phase I results do not indicate that significant contamination is present, then the purpose of the Phase II investigation will be to provide the data required to defend the absence of contamination in support of a NFA decision. Given that screening and non-screening site investigations are essentially the same through Phase II, a new section addressing screening sites has not been added.

Comment 10; Page 4-4, Section *4.3:*.
Uhy do the criteria used to designate investigative "Groups" differ at all from those used to define "Operable Units"? The tvo designations are nearly identical and, for all practical purposes, were developed at the same tine. The main difference between the "Groups" and "Operable Units" is that the former include screening sites while the latter do not. Aside from this difference, only the name has changed, from "Group" prior to signing of the PPA, to "Operable Unit" following signature of the FFA. Both terms should be identified and described together in all sections of the SMP whenever use of one or the other is appropriate (e.g. p. 2-4). This approach should serve to clarify: (i) the relationship between the "Group" and "Operable Unit" designations and (ii) the authority under which the investigation is proceeding at present.

The SMP text should also be amended to clarify that the designation of Operable Units is a dynamic process (i.e., as more data becomes available, it may be appropriate to re-define Operable Units based on the nature and/or extent of detected contamination). For example, Site 13 is now being investigated with Sites 32, 33 and 35 (Operable Unit 10), due to the identification of related contamination during a screening phase of investigation. Polloving further investigation, it may become appropriate to designate these sites as a single Operable Unit for the purposes of preparing a ROD and selecting a Remedial Action.

Response:
This grouping of sites was done approximately three years before there was an FFA. As stated in the text on page 4-4, the "grouping" of sites was done in order to facilitate implementation of the NAS Pensacola program. This organization is internal, and has no bearing on the authori'ty under which the investigation is proceeding at present. Table 2-1 very clearly lays out the relationships between groups and OUs. It should be noted that this subject has been discussed at several recent RPH meetings including the June 16 and 17, 1992, meeting. Based on these meetings, the Navy believes that this is no longer an issue, especially in light of the topic of regrouping and reprioritizing of sites that was discussed at the June 1992 meeting.

This comment is noted. Text clarifying that the designation of OUs is a dynamic process has been added to Section 2.3.

Comment 11; Pages 4-4 through 4-5:
EPA concurs with FDER's comment regarding the 90% draft. All parties to the FFA should receive the 90% draft for review, making the 100% draft the final document.

Response:
As agreed at the January 13, 1992, RPM meeting in Atlanta, the 90% draft will no longer be submitted. From now on, the first submittal of all documents will be the 100% draft, followed by the draft final. The text in Section 4.5 has been modified accordingly.

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Comment 1; Page 1-1, [illegible]
The [illegible] assessments to be p[illegible] will include screening...Remedial Investigations ([illegible] as defined by the [illegible]sive Environmental sp[illegible]on [illegible]; Act of 1980 (CERCLA)...." The text should be [illegible]ed to clarify that, under CERCLA, what is being referred to here as a 'screening RI" is technically a P[illegible] Inspection [illegible] Specifically, as stated in 40 CFR *5300.420*) two of the primary purposes of the SI are to (i) "eliminate from further [illegible]tion those releases that pose no significant threat to public [illegible]r the environm[illegible]...," and (i "collect data...to [illegible]erize the release [illegible]tiv and rapid [illegible]ati of the RI/FS or re[illegible] under other authori[illegible]d [illegible]; the work plans [illegible]p for those PSCs [illegible]h have been designated as screening sites [illegible]l [illegible] a process for obtaining data of suffi[illegible] quality and quantity to satisfy dat needs" (40 CFR [illegible] (i.e. to ac[illegible] the [illegible]ted objectives).

Response:
This comment is noted. The text has been modified to indicate that a 'screening RI" is approximately equivalent to a PA/SI.

Comment 2; Pages 2-2 through 2-5, Section 2.3 and Table 2-1.
Please refer to comment 2 on the SHP.

Response:
Reference to Sites 19, 20, 21, 23 and 37 has been deleted from the text and table. A note was added to the text indicating that this was done.

Comment 3; Page 2-5:
Please refer to comment 1 on the SHP.

Response:
The listed criteria are contained on page 7 of the PFA Site Hanagement Plan. The text has been modified to clarify this.

Comment 4; Page 2-6, Figure 2-1:
Please refer to comment 3 on the SMP.

Response:
Site 30 has been identified on the figure and a separate figure shoving the location of Site 36 has been added to the document. The request to have the sites that have been transferred to the UST program on this map seems contradictory to the EPA's comment no. 2, and it is inappropriate for them to be located on this map, which depicts Naval Installation Restoration Program (NIRP) sites. Finally, the quality of the figure will be improved.

Comment 5; Page 2-7, Paragraph 3:
Please refer to comment 10 on the SMP.

Response:
See the response to EPA comment no. 10 for the SMP.

Comment 6; Page 2-8, Figure 2-2:
Please refer to comment-7 on the SNP.

Response:
See the response to EPA comment no. 7 for the SHP.

Comment 7; Page 2-9, Paragraph 2:
Please refer to comment 1 on the present document.

Response:
See the response to EPA comment no. 1 for this document.

Comment 8; Page 5-1, Section 5.2; and Page 5-7, Section 5.3.7:
Please refer to comment 11 on the SHP.

Response:
See the response to EPA comment no. 11 for the SHP.

Comment 9; Page 5-9:
Please update the name of the NOAA contact from John Lindsay to Waynon Johnson.

Response:
The text has been modified accordingly.

GENERIC QUALITY ASSURANCE PROJECT PLAN

Comment 1; Pages 1 through 3-4:
According to Appendix A of the Federal ties Agreement FA) Sites 19, , 21, 23 and 37 have been to the N U
Please make the necessary corrections to the text and to Table 3-1.

Response:
Reference to Sites 19, 20, 21, 23 and 37 has been deleted from the text and table. A note vas added to the text indicating that this vas done,

Comment 2; Page 5-1:
The definition provided here for USEPA DQO Level V data is unclear and aisleading. Please expand and clarify in accordance vith the more accurate definition provided in Table 5-1 (page 5-2).

Response:
The DQO levels discussed on page 5-1 are the Navy's interpretation of the EPA DQO levels. The Navy discusses these interpretations in the June 1988 Naval Energy and Environmental Support Activity Document No. 20.2-047B, Sampling and Chemical Analysis Quality Assurance Requirements for the Naval Installation Restoration Program. The text has been modified to clarify the Navy's interpretation of USEPA DQO level V data.

Comment 3; Pages 6-1 through 6-4, Section 6.1.1:
The preliminary survey outlined in this section alone cannot be used to determine or rule out the possibility of an airborne emission. The OVA responds to methane and can give false positives. Its detection limits are relatively high. Semi-volatile organic compounds will not be detected by either the OVA or the Hini-Ram. The Mini-Ram particulate monitor does not measure gases emanating from the site. Some of the constituents of concern (e.g. pesticides, PCBs) are commonly measured in the nanograms per cubic meter range, vhile the instrument to be used here measures in milligrams per cubic meter. The Hini-Ram has a high degree of inherent uncertainty, as evidenced by its high detection limits. VOCs are more commonly measured by the TO-14 aethod and PCBs/pesticides by the TO-4 method. Soil, water, sediment, and groundvater data will be more important in determining air sampling needs. The text must be revised to indicate that the preliminary assessment data will only serve a supplemental role in this process. Specifically, please revise the first portion of paragraph 2 on page 6-2 and the final paragraph of Section 6.1.1 (page 6-4) accordingly.

Response:
The text in Section 6.1.1 has been modified accordingly,

Comment *4;* Page 6-3, Paragraph 2:
Other documents indicate that an HNU will also be used for monitoring, not just an OVA. Please correct this discrepancy.

Response:
Only an OVA is used for the purposes of conducting the preliminary air survey - an HNu will not be used in performance of this survey. An HNu may be used to monitor air for health and safety purposes.

Comment 5; Pages 6-4 through 6-8, Section 6.1.2:
a) Further clarification is needed as to exactly when each of the proposed air sampling methods will be utilized.

b) With regard to the whole air collection methods, when will a glass syringe be use to collect samples? When will Tedlar bags be used to collect samples? What holding times will be used for samples collected by these methods? How will shipping be accomplished for VOC samples collected by these methods?.

c) For samples collected on absorbents such as Tenax, which compounds will be analyzed for? Will duplicate samples be taken? Will the samples be voided if breakthrough is found? Will the target compounds be limited to those listed in EPA Method TO-17?

Response:
Again, these are new comments on previously reviewed and approved material. This section was modified significantly in 1990 in response to EPA comments. If the Navy's response to comments were not acceptable, the EPA should have notified the Navy at that time. Is it EPA's intent to re-review and provide a new set of comments on previously reviewed and approved material every time a document is partly revised?

a) As stated in Section 6.1.2, the selection of the air sampling method to be utilized will depend greatly on the results of the preliminary survey and the Phase I multimedia sampling effort. In addition, the analytes to be sampled for, the desired detection limits, and the number of parameters will also impact the selection of a sampling method. Whole air sampling will generally be used when there is a large suite of analytes of interest. Adsorpent (solid?) media may be used when only a few specific analytes are required.

b) During whole air collection ambient air samples will be collected in. a stainless steel canister, soil gas samples will collected in Tedlar bags, and a glass syringe will be used in point source situations (such as from a stack). Holding times will be determined based on the requirements of the applicable method as specified in the Compendium of Hethods for the Determination of Toxic Organic Compounds in Ambient Air, EPA/600/4-89/017.

Stainless steel canisters which contain whole air samples will be sealed, packaged, and shipped to the laboratory in a box, cooler or other appropriate container, The samples will not be iced. Samples collected on solid adsorpents will be replaced in the impermeable containers in which the original media were shipped from the laboratory (such as copper tubing). The samples in their impermeable cases will be packaged with ice and shipped to the laboratory for analysis.

c) For samples collected on absorbents such as Tenax the target analytes (and consequently the type of tube or sample media) will'depend on the criteria discussed in Section 6.1.2 and in paragraph 1 above. Target analytes are site specific and will be discussed in the appropriate work plan and associated SQAP. Duplicate samples will be collected during each sampling period.

During sampling, a back-up cartridge will be placed on one of the sampling pumps to monitor for breakthrough. If breakthrough is found the samples will be voided.

When sampling vith solid adsorpents such as Tenax tubes, the target compounds will be confined to those listed in EPA TO-1. If coapounds outside this list are of interest, whole air sampling will be used.

Section 6.1.2 has been modified to clarify the above responses, (a), b), and c)).

Comment 6; Page 6-6, Bullet 2:
Replace the vork "passivated" vith "subatmospheric."

Response:
The text has been modified accordingly.

Comment 7; Page 6-8, Section 6.13:
The current particulatg standard in 40 CFR 50.6 (both primary and secondary) is 150 ug/m of pm_{10}. The mini-ram is only a very rough survey instrument for the determination of particulate. Particulate sampling should only be conducted if there are elevated concentrations of metals in the soil, and when done, the sampling should conform to the protocol in 40 CFR 50, Appendix G and *40* CFR 58.

Response:
This comment is noted. The text has been revised to indicate that particulate air sampling will be conducted if elevated concentrations of metals are detected in soils during Phase I, and will not be based on mini-ram survey results.

Comment 8; Pages 6-12 through 6-13, Section 6.14:
a) What target analytes will be analyzed for? Will the PUF-XAD-2 sandwich be used as sample media? Will compendium Method TO-4 be used? What criteria will be used to determine whether or not semi-volatile monitoring is necessary?

b) The potential for semi-volatile emissions is not directly related to particulate concentrations (i.e. lov particulate concentrations do not necessarily mean lov semi-volatile organic concentrations). Soil data will therefore be crucial to properly siting the High Volume PUP samplers used for monitoring pesticides, PCBs and PAHs.

Response:
Again, these are nev comments on previously revieved and approved material.

a) The target analytes are site-specific and will be based on the results of the preliminary survey and the Phase I multimedia sampling Qta.

PUP-SAD-2 sandwich filters will be used.

Compendium Method TO-4 will be used as required for analysis of organochlorine pesticides and PCBs. The method used to collect samples for pesticide/PCB analysis will depend on the criteria discussed in Section 6.1.2.

The decision to collect air samples for semi-volatile analysis will depend upon the results of the preliminary air survey and the Phase I multimedia sampling effort.

The text in Section 6.1.4 has been modified to clarify the above responses (a), b), and c)).

b) This comment is noted.

Comment 9; Pages 6-24 through 6-25, Section 6.4:
The soil headspace survey method provided here is inadequate and must be revised. A 16-ounce jar will not provide adequate headspace for the OVA. Five minutes is insufficient time for the sample to reach equilibrium. The sample must be equilibrated to 25°C rather than 20°C.

Response:
The methodology for headspace given in this document is in conformance with the procedures required on petroleum-contaminated sites as defined in Chapter 17-770, Florida Administrative Code (FAC). Given this, it is not in the Navy's best interest to arbitrarily utilize alternative methods as suggested above by the EPA. Text pursuant to the fact that this method conforms to Chapter 17-770, FAC has been added to the text.

Comment 10; Page 6-28, Paragraph 4:
A 2-ounce glass jar is recommended for the collection of VOC soil samples, as opposed to the proposed 40-ml glass vial.

Response:
The text has been modified accordingly. If 2-ounce glass jars are unavailable, 40-ml glass vials will be used.

Comment 11; Page 6-29, Paragraph 6:
Samples must be screened with an OVA or HNu as a matter of practice, not "as deemed necessary."

Response:
The text has been modified accordingly.

Comment 12; Page 6-37, Section 6.8.2:
The practice of discarding purge water on the ground surface away from the well contradicts the investigation-derived waste policy included in the site-specific work plans. All purge water must be containerized, as indicated in these latter documents.

Response:
The methodology for the disposal of purge water from Phase I temporary wells will be addressed in the June 16, 1992, Remedial Project Manager's (RPM) meeting in Tallahassee.

Comment 13; Page 6-38, Paragraph 4:
After the sample is preserved, the pH should be checked to ensure that enough preservative has been added.

Response:
The procedure for checking sample preservation is provided in Section 7.4, page 7-11, paragraph 3 of the GQAPP.

Comment 14; Page 6-40, Section 6.10:
The Region IV ECB SOP/QAM requires a deionized water rinse after the tap vater rinse and before the solvent rinses (see Appendix B.8: Field Equipment Cleaning Procedures).

Response:
The text in Section 6.10 has been modified accordingly.

Comment 15; Pages 6-41 through 6-42:
Please correct the page numbers to eliminate the duplications shown on the bottom center (page 6-41) and the top right corner (page 6-42) of these pages.

Response:
The page numbers have been corrected.

Comment 16; Page 6-42, Paragraph 3:
The practice of pouring purge and development vaters back into the temporary monitoring well prior to removal of the the temporary well is not acceptable, unless the analytical results from the groundvater sample indicate that the groundvater does not contain constituents of concern. In addition to potentially clogging the well screen and filter pack with entrained sediments, this practice may also adversely affect the quality of future groundvater samples.

Response:
See the response to EPA comment no. 12 for this document.

Comment 17; Page 6-43, Table 6-1:
This table indicates that COC soil samples will be collected in 4- or 8-ounce jars. As stated in comment 10., a 2-ounce jar is recommended.

Response:
Table 6-1 has been modified accordingly.

Comment 18; Page 6-47:
There is no "Page: 46 of 46." Repagination of this entire section is needed.

Response:
Pages *6-43* through 6-47 have been repaginated.

Comment 19; Pages 7-11 through 7-12, Section 7.4 and Table 7-1:
Pour drops of concentrated HCl *are* required for the preservation of water samples to be analyzed for volatile organic compounds.

Response:
The text has been modified accordingly.

Comment 20; Page 7-15:
The reference here and in Tables 7-1 and 7-2 should be updated to July 1, 1991.

Response:
The text has been modified accordingly.

Comment 21; Page 9-8 through 9-20, Table 9-5:
See comment 20. Also, the reference to "Standard Hethods for the Examination of Water and Waste Water should be updated to the 17th edition, 1989.

Response:
The text on pages 9-8, 9-9, and 9-12, and Table 9-5, have been revised accordingly.

GENERAL HEALTH AND SAFETY PLAN

Comment 1; Page 3-5:
The decontamination procedure given here for non-metallic sampling equipment is acceptable; however, the use of 10% nitric acid prior to the distilled water rinse may not be necessary. The ECB SOP/QAM Appendix B.8: Field Equipment Cleaning Procedures, does not include this step. Also, the use of hexane to rinse excessively contaminated equipment could present health risks via inhalation, etc.

Response:
The use of a 10% nitric acid rinse is necessary for Teflon sampling implements which will be used to collect samples for aetals analysis. The text on page 3-5 has been revised to indicate that air-purifying respirators (APRs) will be worn by personnel when hexane is used for decontamination procedures.

Comment 2; Page 5-6:
"When radiation levels are tvice above background or higher.. .." Please explain why radiation levels must be twice above background before the team members will be monitored with the GM detector. It would seem that any radiation level above background would be of concern.

Response:
In Escambia County, Florida., radiation occurs naturally at very low levels. Hovever, fluctuations in these levels normally occur over the course of a day. By setting the action level at twice above background (still a very conservative level given the naturally occurring levels in Florida), potential radiation contamination can be differentiated from these normal fluctuations.

Comment 3; Page 7-4:
The practice of pouring purge and development waters back into the temporary monitoring well prior to the removal of the temporary well point is not acceptable unless the analytical results from the groundwater samples indicate that the groundwater does not contain contaminants of concern.

Response:
See the response to EPA comment no. 12 for the GQAPP.

Comment 4; Appendix A:
Please include a Materials Safety Data Sheet (MSDS) for hexane.

Response:
The requested MSDS has been added to Appendix A.

RESPONSES TO COMMENTS FROM
THE U.S. ENVIRONMENTAL PROTECTION
AGENCY, REGION IV (EPA)
DRAFT GROUP L WORK PLAN
NAVAL AIR STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA

Comment 1; General Comment:
The following comments, identified for the Group H Work Plan, are also applicable to the Group L work plan and must be addressed in its revision:

4, 6, 7, 9, 11, 12, 13, 15, 16, 17, 20, 22, 26, 27, 28, 36, 38, 41, 43, 45, 46

Response:
See the responses to EPA comment nos. 4, 6, 7, 9, 11, 12, 13, 15, 16, 17, 20, 22, 26, 27, 28, 36, 38, 41, 43, 45, and 46 for the Group E work plan.

Comment 2; Page 1-1:
As has been discussed in previous reviews, the phased approach presented here is not acceptable. In particular, with regard to the investigation of screening sites, the primary goal should be to collect adequate information to make the dete'rmination of whether an RI/FS or No Further Action (NFA) is required as efficiently as possible. Screening level data (DQO Level 1 and 2) are acceptable to show that contamination exists and that an RI/FS study is warranted. However, due to the probability of false negative data, this level of data is not acceptable to show that no contamination exists, and therefore further site characterization will be required before the site can be eliminated. Full Scan DQO Level IV data must be used to substantiate NFA decisions. The number and location of samples must also be adequate to verify the absence of contamination for all potential pathways and media. In order to achieve this goal, acceptable background samples must also be collected.

If the results of this initial CERCLA SI-type investigation indicate the need for an RI/FS, then an amendment to this work plan outlining a proposed RI/FS in accordance with EPA's previously-submitted reviews on other RI/FS Work Plans shall be prepared and submitted for review.

Response:
See the response to EPA's April 1, 1992, comment no. 5 for Ecology and Environment, Inc.'s, (E & E's) December 1991 Draft Site Hanagement Plan (SHP). Base-wide background soil and groundwater samples will be collected as part of the Site 1 Phase II investigation (see the revised vork plan for Group A-Operable Unit [OU] 1), and background sediment and surface water samples will be collected as part of the OUs 15-17 investi ations.

Following evaluation of the Phase I results of the Group L sites, a revised Phase II section of the work plan will be submitted in addendum format to all parties of the PPA for review.

Comment 3; Page 3-1, Section 3.2:
According to this section, soils were removed from the borrow pit (Site 5) for use as cover at the Sanitary Landfill (Site 1). Section 2.2 states that the borrov pit surface was only about 1 foot below the natural grade at the time of the site reconnaissance. Historical aerial photographs and existing site records should be used to determine the original excavation depth and vhether this pit vas backfilled after removal of the original soils.

Response:
This comment is noted.

Comment 4; Page 7-6, Paragraph 3:
Site 1, noted here and in succeeding pages, should be located on Figure 2-1 for reference.

Response:
The relative location of Site 1 is clearly stated on this page; its actual location is illustrated in the SMP for the NAS Pensacola investigation. Given that it is approximately one-half mile northeast of the Group L sites, it cannot be shown on Figure 2-1 because of space constraints.

Comment 5; Pages 14-1 through 14-22:
Please refer to our comments on the December 1991 GQAPP.

Response:
Further clarification is needed regarding which comments on the GQAP the BPA is refering to. However, given the lack of specificity, see the responses to EPA's April 1, 1992, comments for the December 1991 GQAPP.

Comment 6; Page 14-2, Section 14.1.1.3:
A habitat/biota map must be generated in conjunction vith the habitat/biota survey for each site.

Response:
The generation of a habitat/biota map has been added to the text in Section 14.1.1.3.

Comment 7; Pages 14-4 through 14-6, Figures 14-1 through 14-3:
The distribution of soil borings and monitoring wells shown in these figures indicates that an unbiased sampling approach will be utilized. In order to accomplish the goal of confirming the presence or absence of contamination at these sites as effectively and efficiently as possible, a strongly biased sampling strategy must be employed to the maximum extent practicable. For instance, the information gathered in the aerial photograph analysis and the numerous surveys which precede field sampling should be used to focus sampling activities on the more highly suspect contaminant source areas, surface vater run-off pathways from these suspect source areas, etc.. This approach should make it possible to reduce the number of samples, particularly soil samples, to be collected and analyzed for costly full-scan analyses.

The potentiometric surface of the surficial zone is a subdued replica of the topography, except where heavy pumping occurs. Based on the topographic map, Site 4 is located south of a groundwater divide, 16 is located north of the divide, and Sites 5 and 6 are located on or near the divide. Care should be taken to ensure that the well installation plan will adequately define any contaminant plume which may exist.

Furthermore, the potential vertical ground-water flow direction between the Surficial Zone and the Main Producing Zone varies beneath NAS Pensacola. At higher elevations, such as at the center of the peninsula, the water levels in the Surficial Zone are greater than water levels in the Xain Producing Zone. In these areas, the potential vertical ground-water flow direction is from the Surficial Zone to the Main Producing Zone. At lower elevations, water levels in the Main Producing Zone are greater than the Surficial Zone water levels, and the potential vertical flow direction is reversed. If contamination is detected at these sites, it is important that cluster wells be installed as appropriate so that vertical contaminant migration may be monitored.

Regarding the physical distribution of soil borings and monitor wells,

Response:
Given that very little "hard" data is available for these sites, this unbiased approach to sample location is intended to provide the maximum amount of data in order to optimize the Phase II locations. However, the sampling plan for Phase I may be revised in accordance with the results of the preliminary reconnaissance surveys which will be conducted prior to drilling activities. Evaluation of Phase I results takes into account all of the factors mentioned by the EPA reviewer, and, on sites where Phase I'has been completed, has resulted in strongly biased Phase II sampling plans.

This comment is noted.

This comment is noted.

Comment *8;* Page 14-5, Figure 14-2:
Section 2.2 states that Site 5 is "unpaved and sparsely vegetated". It is recommended that two to four additional surface soil samples be collected at this site, between the central sampling point and the peripheral sampling locations, to determine whether soil contaminants that might adversely affect vegetation are present.

Also, the southeast drainage ditch is located near Sites 5 and 6. Pending screening results and further characterization of surface water run-off pathways from these sites, three surface water/sediment samples should be collected from this ditch: one upstream/upgradient and two downstream/downgradient.

Response:
Four surface soil samples have been added at the locations suggested by the EPA.

This comment is noted, and will be deferred to the development of the Phase II vork plans for these sites.

Comment 9; Pages 14-6 through 14-7, Section 14.1.3.1:
Surface vater samples must be collected from all three sediment sampling locations in the drainage ditch at Site 16. Surface water/sediment samples must also be collected from the arm of Bayou Grande adjacent to Site 16.

Response:
For screening purposes, one surface vater sample at the presumed point-of-entry and one surface vater sample at the outlet into Bayou Grande will suffice. If it is deemed appropriate based on Phase I results, additional surface vater sampling in the drainage ditch will be conducted. Surface water/sediment sampling in Bayou Grande will be conducted as part of the OU 15 (Bayou Grande Area) investigation.

Comment 10; Page 14-7, Paragraph 5:
Figure 14-3 shovs only 21 soil boring locations. Please correct this. discrepancy.

Response:
The text and Table 14-1 have been modified accordingly.

Comment 11; Page 14-8, Table 14-1:
Please revise this table to include the required QA/QC samples (field blanks, trip blanks, etc.).

Response:
As for the Phase I effort at all previous sites, duplicate samples are the only QA/QC samples to be used for the Phase I screening effort.

Comment 12; Page 14-10:
A prolonged (i.e. multi-phased) field investigation seems particularly inappropriate for sites such as these where no direct evidence for the past disposal of hazardous vaste exists. The goal should be to eliminate sites which will not require an RI/FS from the program as quickly as possible, so that the resources of all parties concerned can be focused on more problematic sites.

If Phase I is structured similar to a CERCLA site investigation, with full scan DQO Level IV data, the information needed to support a no further action decision will be available after Phase I. The investigation, as proposed, will not generate sufficient 'data for the no further action decision until after the completion of Phase II. If contamination is detected in the SI phase, warranting conduction of an RI/FS, then the RI/FS (to be presented in an addendum to the current work plan) must be designed to permit determination both the nature and extent of contamination in a single round of field investigation.

Response:
This comment is noted. See the response to EPA comment no. 5 for B & E's December 1991 Draft SMP.

Comment 13; Page 14-12, Table 14-2:
Why will no field blanks be collected for ground-water?

Response:
Table 14-2 has been revised to indicate that field blanks will be collected for groundwater, not soils as indicated on the original table.

Comment 14; Page 14-13, Table 14-2:
Surface water must be preserved in the same manner as ground-water samples.

Response:
Surface water samples will be preserved in the same manner using the same preservatives as the groundwater samples. Consequently, the preservative blank that is proposed to be collected will be sufficient to check the integrity of the preservatives used for both of these media.

Comment 15; Page 14-17, Paragraph 5:
In the event that screening results indicate the presence of contaminants known to have a density which exceeds that of water, one or more wells must also be installed below the water table interface.

Response:
This comment is noted, and will be deferred to the development of the Phase II work plans.

Comment 16; Page 14-18, Paragraph 3:
How long will the short-duration specific capacity test run?

Response:
For a given well, the specific capacity tests will be performed until the observed water level drawdown at a specific discharge rate stabilizes.

Comment 17; Page 14-18, Paragraph 4:
Wells must be developed prior to any aquifer testing in order to obtain the most accurate results from the aquifer.

Response:
The specific capacity testing will be performed after the development pump has been turned off and the water level has returned to normal static level. The text has been modified to clarify this.

Comment 18; Page 14-20, Paragraph 4:
The topographic survey and base map must be completed much earlier in the investigation so that the results will be available for use in evaluating other data.

Response:
The topographic survey referred to here is for the purposes of remedial design. All of the tasks performed prior to this can be done vith sufficient accuracy utilizing existing site maps, United States Geological Survey topographic maps, and field mapping techniques.

Comment 19; Page 14-21, Paragraph 5:
All purge, development, etc. water should be containerized until the analytical results *can* be revieved to ensure that the vater does not contain any contaminants of concern.

Response:
The issue of disposal of the purge water from the Phase I temporary vells was addressed during the June 16 and 17, 1992 RPM meeting in Pensacola, Florida.

Comment 20; Pages 16-1, 17-1, 18-1 and 19-1:
The sections detailing components.of the Groundwater Modeling, Treatability Study, Baseline Risk Assessment and the Feasibility Study should either be deleted or modified to clearly indicate that these activities will not be required unless the determination is made that an RI is needed for these screening sites.

Response:
Text stating that these sections will not be required on non-RI sites has been added to the work plan in Section 1.

Comment 21; Page 18-3, Section 18.3:
Toxicity assessment for the biota may involve toxicity testing (e.g. bioassays or chemical analysis of tissues) if the existing toxicity information is insufficient.

Response:
This comment is noted.

Comment 22; Pages 20-1 through 21-1:
Sections detailing the reports to be generated must be modified in accordance with all relevant preceding comments.

Response:
The text on page 20-1 has been modified to delete the preparation and submittal of a 90% draft. Prom now on, the only submittals will be the 100% draft and draft final, both of vhich will be submitted to the EPA/FDER/TRC.

Comment 23; Pages 23-2 through 23-5:
The folloving comments must be incorporated in revision of the Group L project schedule:

All survey tasks, including the geophysical survey, must be accomplished in the first three weeks of the investigation.

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Laboratory analyses should begin with collection of the first sample requiring laboratory analysis.

The current schedule must be revised to indicate completion of the investigation in a single phase. A formal report should not be submitted until the investigation is complete. Report preparation should begin while the investigation is underway and conclude no later than four weeks from receipt of the final piece of data.

All sampling activities and hydrologic assessment should run concurrently with monitoring well installation.

Response:
The schedules shown on pages 23-2 through 23-5 are primarily for planning purposes. There is currently no formal schedule in the FPA governing the work to be conducted on this site group; thus revision of the planning schedule at this point would serve no purpose. The Navy intends to organize the field investigation for Group L such that it will be performed concurrently with those of Groups E, I, P, and Q. Every effort will be made to incorporate the EPA suggestions into the schedules for all of these site groups.

See above response.

See above response.

See above response.

Comment *24;* Appendix A:
The site safety plans were prepared in June, 1989. They should be updated and modified as necessary to reflect the protocols set forth in the December 1991 Generic Health and Safety Plan.

The decontamination procedures do not conform with the U.S. EPA Region IV Environmental Compliance Branch SOP/QAM

Response:
These site-safety plans were developed based on the site information available at the time; given that no additional data for these sites has become available in the interim, the site-safety plans are still valid. All procedures set forth in these plans are in accordance with the December 1991 Generic Health and Safety Plan.

The decontamination procedures have been modified to conform with the Region IV SOP/QAM field cleaning procedures.

Comment 25; Appendix B, Pages 6-7:
If EPA methods 601 and 602 are used, second column confirmation is required.

All references to Standard Methods for the Examination of Water and Wastewater must be updated to the 17th edition (1989).

Response:
Second column confirmation analyses will be performed on all Phase II samples.

The appropriate method numbers listed in Appendix B have been modified accordingly.