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UNITED STATES ENVIRONMENTAL PROTECTIO.

REGION IV

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

N00204.AR.000789
NAS PENSACOLA
5090.3a

MEMORANDUM

DATE: SEP 22 1994

TO: NAS Pensacola Team

FROM: Allison D. Humphris, RPM ADH 9/22/94
DOD Remedial Section, FFB, U.S. EPA Region IV

RE: Transmittal of comments on Technical Memorandum for Sites 10 & 14 (Phase 1 Results)

Attached are EPA's comments on the subject document. Please give me a call if you have any questions or wish to discuss these issues further. The Navy need not revise and resubmit the Technical Memorandum, given its status as a secondary document. However, in order for EPA to consider the next primary document to be submitted for these sites for approval (i.e. the RI Report), that document must address our attached comments.

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL # of pages ▶ 6

To Bill Hill / Bill Gates	From Allison Humphris
Dept./Agency SOUTHDIV, Remedial Actions Br.	Phone # 404/347-3016
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OPTIONAL FORM 99 (7-90)

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To David Clowes	From
Dept./Agency FDEP	Phone #
Fax # 904/922-4939	Fax #

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OPTIONAL FORM 99 (7-90)

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To Ron Joyner	From
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OPTIONAL FORM 99 (7-90)

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To Brian Caldwell / Henry Reiss	From
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6. Pages 30-31, Conclusions and Recommendations for Further Action: The following additional tasks must be performed in order to complete the investigation far this site:

A. This section ahould evaluate the potential for ecological risk posed by the contaminants contained in the dredge spoils, and the potential for migration of these contaminants into Pensacola Bay and/or the adjacent wetlands. In particular, *what* are the potential pathways from the basins to the wetlands? Are these pathways viable? What would the potential impact on the Bay be in the event of catastrophic failure of the berms (the berms are quite high and reinforced only with rip zap)?

B. Surface water in the basins can act as both an exposure medium and a means of contaminant migration (e.g. dissolved and suspended particulate fractions). In order to assess these potential exposure pathways, surface water samples for chemical analysis must be collected from (i) the upgradient side of each culvert (4 samples total), and (ii) midway between the two culverts in each basin (2 samples total).

C. Due to differences in physical conditions between basin centers and peripheries (e.g. depositional patterns, frequency/duration of submergence), it is possible that contaminants have been deposited inhomogenously throughout these basins. In order to characterice the spatial variability *of* contamination, one additional sediment sample for chemical analysis must be collected from as close to the center of each basin as possible.

D. One sediment sample from each basin outfall will not provide adequate characterization *of* contaminant variability at those locations. In order to obtain this information, EPA recommends that at least one additional sample and a replicate be collected from each basin outfall for chemical analysis (4 samples total).

E. Sediments in the "mudflat" or flatlands area of the western basin represent a potential exposure pathway to shorebirds (food chain transfer). In order to characterize these sediments, two sediment samples must be collected from this area. Both chemical and taxonomic analyses must be performed on these samples. Taxonomic analyses should determine which macroinvertebrates may be living in these sediments (i.e. food source for the *shorebird?)*. If possible, the relative abundance of different species should also *be* determined.

7. Page 32, Recommended Action:

EPA agrees with the Navy's decision to upgrade screening site 14 *to* RI status end perform *6* Baseline Risk Assessment. Additional field activities should be performed as needed and an RI Report which addresses all of the above comments should be prepared and submitted for Agency review and concurrence.

APPENDICES:

1. Appendix B:
It is unclear from Tables 10-2 and 14-2 which samples ate sediment and which are soil. The depth of soil samples should also be included.

Tables 10-2, 10-3, 14-2 end 14-3 appear to present the data in more significant figures than the data would indicate is appropriate. Please revise as needed.

2. Appendix Ct
It is inappropriate to present data which the laboratory has reported as 39 ug/l as 39.0000 ug/l, even with the added caveat that "data are not shown in significant digits.. Data should be presented as reported from the laboratory, Please revise as needed.

A key which includes all data qualifiers presented in the appendix should be provided.

TECHNICAL REVIEW AND COMMENTS
DRAFT TECHNICAL MEMORANDUM: SITES 10 & 14
NAVAL AIR STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA

GENERAL COMMENTS:

1. The text should not refer to the values presented for comparison with the analytical data (e.g. Region III RBCs, FDEP CGs) as ARARs. The correct term for these values is Preliminary Remediation Goals (PRGs). Of the values referenced, only EPA's MCLs and FDEP's FPDWSs *are* promulgated standards. Also, the term "background standards" should not be used in discussing the analytical results for background samples, since the term "standard" has a regulatory connotation.

2. Comparison of soil analytical reeults to USEPA RBCs and FDEP CGs for the aggregate residential scenario will address the potential for exposure through direct physical contact, but not the potential for ground water contamination through leaching. in accordance with EPA Region IV policy, if ground water contamination, or the potential for soil contaminants *to* leach *to* ground water, exists, then site-specific soil action levels must be developed for each detected contaminant. The methodology used *to derive* these numbers must also be provided for review. If the existing data clearly indicate that ground water contamination, or the potential fot ground water contamination via soil leachability, does not exist (thereby alleviating the need to calculate soil action levels), this conclusion should be clearly documented and justified in the text.

In keeping with the above comment, the presentation of analytical results should distinguish more clearly between surface and subeurface soil samples.

3. Groundwater data should be compared to the Safe Drinking Water Act (SDWA) Maximum Contaminant Levels (MCLs), MCLGs, SMCLs and health-based numbers, not 'the U.S.EPA RBCs for Tap Water or RALs fur Contaminated Drinking Water Sites.

Also, in order to evaluate a "worst-case" scenario for ecological concerns with respect to potential ground water discharge to wetlands or other surface water bodies, ground water concentrations should *bo* compared *to* surface water screening numbers and standards.

4. All references to the RBCs should clearly indicate which of the Region III RBCs are "applicable" (i.e., residential or industrial). *The* text should also clearly indicate which RBC table was used (i.e. Hazard Index of 1 or 0.1, date of table preparation),

5. Use of the term "Contaminants of Concern" in these documents is not appropriate. This term, or preferably "Chemicals of Concern" (COC), should be reserved for chemicals which exceed a 10^{-6} risk level or HI of 0.1 in baseline risk assessment scenarios which exceed 10^{-4} risk level or HQ of 1. Please revise the text accordingly.

6. The groundwater background sampling data is suspect due to the high (above MCLs) concentrations of many inorganic chemicals (e.g. beryllium, cadmium, chromium, lead (action level), manganese, mercury, nickel). Unless adequate documentation supporting the representativeness of this data (e.g. collected from a contaminant-free area using adequate field sampling techniques), this data cannot be used to discount the presence of ground water contamination and/or the need for remediation at these sites.

7, According to the text on page 4, 4.25" ID augers were used to install wells. These augers are too small. In the future, 6.25" augers must be used, a6 specified in the ECBSOPQAM.

SPECIFIC COMMENTS - SITE 10:

1. Page 7, Paragraph 1:
"[The] results [of a geophysical survey of the area containing buried drums] will ba an appendix to the site investigation report." During recent Partnering meetings, the Parties discussed the possibility of addressing these buried drums through a removal action. What is the status of this proposed removal action? Also, the preceding quote indicates that the Navy is planning to expand Site 10 to include the buried drum area. If this ia the case, this should be more clearly indicated in the present: document and the FY95 Site Management Plan.

2. Page 9, Paragraph 2:
Phenols were detected in both soil and ground water samples during E&E's Phase I investigation. Yet during the current sampling round, no organics were detected in ground water samples, and only pesticides and PCBs were detected in soils. An explanation for this discrepancy in analytical results must be provided.

3. Page 14, Paragraph 1:
The mean background concentrations for soils should be calculated using only the detected concentrations; they should not include one-half the detection level for non-detected parameters.

4. Page 14, Paragraph 3:
The apparent purpose of collecting the sediment sample in the drainage ditch waa to evaluate possible contaminant migration from Site 10 to the nearby wetland. If so, this should be clearly stated, and the results evaluated accordingly, in the text.

5. Page 18, Paragraph 1:
The recommended action is poorly worded. The detected pesticides and PCBs in subsurface soil samples *ate* clearly related to past site activities, specifically, the filling and reworking of the site described on page 17. Please revise the text accordingly.

EPA concurs with the Navy's recommendation of no further action for screening site 10. A Preliminary Site Characterization Report which addresses the above comments should be prepared and submitted for Agency *review* and concurrence;

SPECIFIC COMMENTS - SITE 14:

1. Page *21*, Paragraph 4:
As was the case far Site 10, phenols were detected in both ground water and soils during the E&E Phase I investigation. Yet phenols were not detected in either medium during the present investigation. *An* explanation *for* this discrepancy in analytical results must be provided.

2. Page 23, Paragraph 3:
It is quite possible that the berm blocking *tho* creek in the south wetland is a temporary feature which is dependent upon the nearshore hydrodynamics of *the* Pensacola Bay system. If so, then the creek in the south wetland might be connected to Pensacola Bay during some portion of *the year*. This point should be addreeeed, end the potential impact on the Bay evaluated, in the text.

3. Pages 24-25, Figures 5 & 6:
One or both of these figures should illustrate the location of: (i) the creek outlet; for the north wetland, and (ii) the creek *for* the *south* wetland and the berm blocking the creak outlet.

A potentiometric surface map should not be generated using only two well points. The general direction of ground water flow was determined during E&E's Phase I investigation through the sampling of multiple temporary wells. The text should refer to thie data in order to illustrate the direction and gradient of ground water flow. The potentiometric surface from the Interim Data Report should be included in the present document.

4. Page 27, Paragraph 4:
See comment 3 for Site 10.

5. Page 28-29, <u>Soil</u>:
The settling basins contain water at least part *of* the timo, as evidenced by the presence of drainage control structures. The dredge spoil samples *from* these basins must therefore be evaluated as sediments, particularly for ecological concerns. Please compare the analytical results for samples collected from within the basins with U.S.EPA Region IV draft sediment screening values.