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NAS PENSACOLA
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April 5, 1995

Florida Department of Environmental Protection
Federal Facilities Coordinator
Attn: David Clowes
Twin Towers Office Building
2600 Stone Road
Tallahassee, Florida 32399-2400

Re: Final Remedial Investigation **Report**,
Site 39, **NAS** Pensacola
Contract # N62467-89-D-0318/059

Dear Mr. Clowes:

On behalf of the Navy, EnSafe/Allen & Hoshall is pleased to submit **two** copies of ^{FINAL} ~~the Draft~~ Remedial Investigation Report for Site 39 at the Naval ~~Air~~ Station Pensacola in Pensacola, Florida.

If you should have any questions or need any additional information regarding the report, please do not hesitate to call me.

Sincerely,

EnSafe/Allen & Hoshall


F. M. Beiro

Task Order Manager

Enclosure

cc: **BILL** Hill, SOUTHNAVFACENGCOM without enclosure
EnSafe/Allen & Hoshall file without enclosure
EnSafe/Allen & **Hoshall** Pensacola file without enclosure

**TECHNICAL REVIEW AND COMMENTS FDEP
REMEDIAL PROJECT MANAGER
DRAFT REMEDIAL INVESTIGATION REPORT
SITE 39 (OAKGROVE CAMPGROUND)
NAVAL AIR STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA**

COMMENT 1:

Report Document Page: The final RI, as well as all **final technical** documents, should be signed and sealed by a valid State of Florida **certified** professional. This page documents an expired professional certification.

RESPONSE:

Agreed, the Final RI **report** will be signed and sealed by a valid **State** of Florida **certified** professional and the **Report** Documentation Page will be revised to reflect the most recent expiration date.

COMMENT 2: Page 5-1:

It should be noted that Sampling and Analysis Plans are reviewed and approved by both **FDEP** and EPA.

RESPONSE:

Agreed, the Final RI report will be revised to indicate on page **5-1** that both **FDEP** and **EPA** review and approve sampling and analysis plans.

COMMENT 3:

The analytical results of SVOCs in **soils** (Table 7-2) for samples **39S0101 to 39S0403** is repeated three times and the data for the other soil samples (**39S05, 39S06, 39S08, 39S09, 39S10** and **39S11**) is not provided. This error should be **corrected**.

RESPONSE:

Agreed, Due to clerical errors **during** production, Table 7-2 is **confusing** and **will** be revised in the Draft Final Site **39 RI** report. This will correct the confusion of the multiple results and will also provide data for the other **soil** samples.

COMMENT 4:

In Section 7.0 figures, the specific contaminants in soil and groundwater should be denoted, because the regulations are chemical specific. As stated many times in meetings and in review comments to previous documents, information should be presented in the clearest manner possible, such as plotting specific contaminant levels on figures, to increase document review efficiency.

RESPONSE:

At FDEP's request all figures in Section 7 will be modified to include only contaminants that exceed PRGs.

COMMENT 5:

Arsenic is above the Florida Soil Cleanup Goal of 0.7 ppm in post-removal confirmatory sample 39S09 at 2.2 ppm. Comparisons to the background values were not available since they were not provided.

RESPONSE:

Arsenic's Florida Soil Cleanup Goal was exceeded in sample 39S000901 and its duplicate sample 39C000901. However, the detected concentrations were 1.1 and 1.2 ppm respectively, and the NAS reference concentration as reported in table 7-4 was 1.56 ppm. The Draft Final Site 39 RI report will be revised to include this reference concentration value in the written text.

COMMENT 6:

The analytical results of Metals in Groundwater (Table 7-7) for wells 39S01 to 39S04 were repeated four times and the results of the other wells (39GI05 to 39GI07) were not provided. This error should be corrected.

RESPONSE:

Agreed, due to clerical errors during production, Table 7-7 is confusing and will be revised in the Draft Final Site 39 RI report. This will correct the confusion of the same wells with multiple results and will also include the intermediate depth wells.

COMMENT 7:

Monitoring wells 39GS02 and 39GS03 should be resampled using the "low flow technique" to confirm the levels of aluminum and iron detected many times above the source and upgradient well samples.

RESPONSE:

Monitoring wells 39GS02 and 39GS03 were resampled using the "low flow technique". The results were reported in the Draft Site 39 RI *report*, however, due to clerical errors during production, Table 7-7 is confusing and will be revised in the Draft **Final** Site 39 RI *report*. This will correct the confusion of the same wells with multiple results and clearly give results for a second round of sampling from wells 39GS02 and 39GS03.

COMMENT 8:

The sample identification numbers of monitoring wells in Appendices **F** and **G** do not agree with the tables and figures. For example, in the appendix the **analytical** results of monitoring well 39GI005 is given; however, **this** well does not exist at this site. Explanation/correction is needed.

RESPONSE:

Agreed, between the first and second round of groundwater sampling monitoring well 39GI06 was mislabeled as 39GI03 (which does not exist). During the review of the data for the RI report this discrepancy was noted and a site visit to visually check the wells noted the mislabeling. In the report the **data** is reported as well 39GI06 and in the revised Draft **Final** Site 39 RI *report* will remain **so**, the data in the appendix will be revised to indicate 39GI0620 for the sample from this well.

No discrepancy was noted with monitoring well 39GI05, which **does** exist at the site.

COMMENT 9:

What was the technical reasoning **behind** the placement of the intermediate wells at this site? Intermediate well locations were not proposed/approved in the **Final** Sampling and Analysis **Plan** (1993). Intermediate wells **are** generally installed above action levels in the **source** well. However, at this site, the source well does not contain contamination above action levels. **Thus**, it appears that intermediate wells 39GI06 and 39GI07 were **unnecessary**, and even if necessary were no installed in the most advantageous positions.

RESPONSE:

Figure 4-1 on page 9 of the **Final** Sampling and Analysis **Plan** for Site 39 — **Oak** Grove Campground (April 1993) approved by **FDEP** clearly shows the location of the three intermediate monitoring wells installed at Site 39. **On** page 11 of the **SAP** the text explains that 3 intermediate wells were to be clustered with upgradient and downgradient shallow wells.

COMMENT 10:

The quantitation limits used for groundwater sample analysis **are** above Florida **Primary**, Secondary and "free from" Water **Quality Standards** (Chapters **62-520** and **62-550**, F.A.C.). Contract Lab Protocol (CLP) should be adjusted **so** the quantitation limits are at or below State standards. However, to avoid reanalyzing every sample, samples do not **need to** be reanalyzed if the samples were not diluted before analysis, if estimated values **can** be provided, and if significant soil contamination is not present. In the future, the reasoning behind sample dilution should be explained to avoid confusion and facilitate document review. **As** agreed in the June **27-29, 1994** meeting, screening data (predilution) will be provided and assessment phases beyond screening will use quantitation limit analysis at or below State Water Quality **standards**. **This** information has been repeatedly requested for many other sites since July **1994** and **has** not been provided.

RESPONSE:

The Navy recognizes **an** occasional problem with high quantitation limits and fully understands the lack of **data** provided by such "high" limits. At the time this Site **39** data was being collected and analyzed, the decision to provide screening data for diluted samples, was being made. This **data** is not retrievable. The Navy regrets any communication that may have promised this type of screening **data** for Site **39** to **FDEP**.

FDEP should expect better quantification limits on data from the second round of sampling at Category 5 Sites (**9, 29, 34, 10, and 14**) and any future sites. **This** was achieved by requiring the laboratory to use the low concentration statement of work for the CLP analysis of water. Many laboratories **are** not capable of transmitting their **screening** data used for dilution of soil samples. When this **data** is available and is useful in determining if a soil sample should be resampled, the Navy will provide **this** information.

COMMENT 11:

Selection of Chemical of Potential Concern (COPC) (Section **10.2.4**, page **10-10**) for carcinogenic chemicals of concern (COCs) (**1E-4** to **1E-6**) and hazard quotients (**10, 1, and 0.1**) for non-carcinogenic COCs **ar** not acceptable. With the inclusion of the inhalation pathway in the calculation of RGOs/Cleanup Levels, **FDEP** only considers **1E-6** for carcinogenic COCs and 1.0 hazard quotient for non-carcinogenic COCs acceptable. Therefore, the cancer **risks** and hazard quotients of the COPCs above these levels should be renamed COCs, in the consideration of the soil, sediment and groundwater as areas of possible remediation.

RESPONSE:

Agreed, the Draft Site **39** RI **report** will be revised to include **1E-6** for carcinogenic COCs in the Draft Final Site **39** RI **report** and the hazard quotient of 1.0 for non-carcinogenic COCs will be **retained** from the Draft Site **39** RI **report**.

COMMENT 12:

Another helpful means to expedite review would be to reorganize appendices of analytical results, so all the soil and groundwater is together and the quality control data is separate.

RESPONSE:

The Navy provides validated analytical data in appendices to support the use of that data in text. This data is received from the laboratory in CLP standard forms. The forms are lengthy and difficult to read. The Navy has reorganized the data from the forms by matrix for easy reference. The quality control data is located with each matrix for easy use by the audience. If quality control data were separated from each matrix, the audience would have a very difficult chore in associating quality control samples with the actual samples. This association is important because therein lies the defensibility of the data. To this end, the Navy offers all analytical data in electronic format. Please specify the electronic format or software to utilize this data and the Navy will provide diskettes containing the data.