



EnSafe / Allen & Hoshall

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NAS PENSACOLA
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April 5, 1995

U.S. Environmental Protection Agency
Attn: Ms. Allison Humphris
345 Courtland Street, N.E.
Atlanta, Georgia 30365

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

Dear Ms. Humphris:

On behalf of the Navy, EnSafe/Allen & Hoshall is pleased to submit three copies of the Final 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

Henry H. Beiro
Task Order Manager

Enclosure

cc: Bill Hill, SOUTHNAVFACENGCOM — 2 copies
EnSafe/Allen & Hoshall file — 1 copy
EnSafe/Allen & Hoshall Pensacola — 1 copy
Ron Joyner, NAS Pensacola — 9 copies
John Mitchell, FDEP — 1 copy
Melisa Waters, NOAA — 1 copy
David Clowes, FDEP — 2 copies
Tom Moody, FDEP — 1 copy

**TECHNICAL REVIEW AND COMMENTS FDEP
NATURAL RESOURCE TRUSTEE
DRAFT REMEDIAL INVESTIGATION REPORT
SITE 39 (OAK GROVE CAMPGROUND)
NAVAL AIR STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA**

SPECIFIC COMMENTS:

COMMENT 1: Table 7-7 (Summary of Metals in Groundwater)

This table is extremely confusing. There **are** four individual pages of **this** table with varying results shown for the same monitoring wells. Each page should have an identifier (i.e., sampling date; sampling method; etc.).

Also, bold and bracketed results **are** supposedly for those samples which **exceeded** two times the background. **This** was inconsistent on each page. We suggest bold only for those samples exceeding twice background, and bold and bracketed for those exceeding MCLs.

No results were shown for cadmium, selenium, silver, or thallium. Is **this** because of non-detection in either the site wells or the background wells? Please explain.

Why weren't the results of the intermediate wells included in the table?

RESPONSE:

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

During the revision of Table 7-7 changing the way **exceeded standards are illustrated will** be considered.

NO results were shown for the metals **listed** in the comments **because** they were not detected in any of the Site 39 samples. It will be noted on the table that non-detects were **omitted**.

COMMENT 2: Section 7.2 (Groundwater Analytical Results)

In the subsection on Metals and **Cyanide**, the results shown in the text do not correspond with **any** of the results shown in Table 7-7. However, they do correspond with the Appendix **F**. Also, this subsection states, "concentrations for aluminum were not exceeded in samples from the intermediate depth wells." **This** is confusing, **as** the appendix shows aluminum **as** undetected

at varying values which exceed the Florida Secondary Drinking Water **Standard** (FSDWS) of 200 $\mu\text{g/L}$.

In the subsection, Conclusions and Recommendations it **states** that the upgradient shallow groundwater well (GS01) showed **1,1,2,2-tetrachloroethane** at a concentration of 2 ppb. The data results in the appendix shows the contaminant to **be** tetrachloroethene. **Also**, were the background groundwater concentrations based on the quiescent sampling results? The background well results **are** not found in the document.

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 should correct the confusion of the **same wells** with multiple results, it should provide sampling events, and should **also** include the intermediate depth wells.

Although the data indicates that aluminum exceeded the Florida Secondary Drinking Water Standard value of 200 $\mu\text{g/L}$ for **all** the samples, aluminum **was** detected in the analysis blanks associated with **all** the samples. **Based** on data validation procedures outlined in the National Functional Guidelines for **Inorganic** Data Review, (February 1994), action levels were calculated using the five times rule (5x) **and** applied to the highest concentration of aluminum found in the associated blank data. After calculation of the action level for aluminum, **all** positive sample values reported were found to be below the calculated action levels. Therefore, these values were reported as non-detects at the level indicated in each sample, which also **means** that these values are non-detect down to the CRDL (Contract **Required** Detection Limit) for aluminum which is 200 $\mu\text{g/L}$. According to data validation guidelines if the value is above the CRDL and below the calculated action level it should **be** flagged as a non-detect at the level reported.

In the subsection, Conclusions and Recommendations **1,1,2,2-tetrachloroethane** should be tetrachloroethene and this will be revised in the Draft Final Site 39 RI **report**.

The background groundwater or reference concentrations were based on quiescent sampling results. This data will be included in Appendix F in the Draft Final Site 39 RI **report**.

COMMENT 3:

We **are** concerned about the results **and** detection limits shown in the **resampling** event. **All** of the aluminum samples **are** reported **as** undetected, yet each sample has a different "undetected" value and **all** **are** above the FSDWS of 200 $\mu\text{g/L}$. Also, the Florida **Primary** Drinking Water Standard (FPDWS) for antimony is 6 $\mu\text{g/L}$, yet the **detection** limit **was** 10 $\mu\text{g/L}$. **Please** explain the reasons for these variances.

Also, where **are** the results for the background wells? The original sampling and the re-sampling with the quiescent method should be included and identified.

RESPONSE:

Although the data indicates that aluminum exceeded the Florida Secondary Drinking Water Standard value of 200 $\mu\text{g/L}$ for all the samples, aluminum was detected in the analysis blanks associated with all the samples. Based on data validation procedures outlined in the National Functional Guidelines for Inorganic Data Review, (February 1994), action levels were calculated using the five times rule (5x) and applied to the highest concentration of aluminum found in the associated blank data. After calculation of the action level for aluminum, all positive sample values reported were found to be below the calculated action levels. Therefore, these values were reported as non-detects at the level indicated in each sample, which also means that these values are non-detect down to the CRDL (Contract Required Detection Limit) for aluminum which is 200 $\mu\text{g/L}$. According to data validation guidelines if the value is above the CRDL and below the calculated action level it should be flagged as a non-detect at the level reported.

In the case of antimony, the CRDL is 60 $\mu\text{g/L}$ and the IDL (Instrument Detection Limit) is 1.2 $\mu\text{g/L}$, based on data from the laboratory. The concentration of 10 $\mu\text{g/L}$ falls between the CRDL and the IDL and is therefore considered an estimated value. However, this value is still subject to data validation guidelines for inorganic data review. It too was flagged as a non-detect at the level reported due to action levels calculated from blank contamination. However, this value was between the CRDL and the IDL and is considered a non-detect at the IDL which is 1.2 $\mu\text{g/L}$. It should be pointed out here that inorganic IDLs vary slightly from laboratory to laboratory and are based on the calibration of the instrument and the instrument in use. Therefore, values are not reported down to the IDL only the CRDL. Also, data validation guidelines do not require this. All antimony reported values below the CRDL are considered non-detects down to the IDL.

The Navy recognizes that samples with high quantitation limits may not be useable for decision making processes. It is the opinion of the Navy and its contractor that a decision can be reached at Site 39 without this data.

The background groundwater or reference concentrations were based on quiescent sampling results. This data will be included in Appendix F in the Draft Final Site 39 RI report.