



EnSafe / Allen & Hoshall
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NAS PENSACOLA
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September **22**, 1994

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

Re: Site 30, Site 32 and Site 39
Final ~~Time~~-Critical Removal Action Work Plans
for Naval **Air** Station Pensacola
Contract # N62467-89-D-0318/CTO-072

Dear Mr. Clowes:

On **behalf** of the Navy, EnSafe/Allen & Hoshall is pleased to submit two copies each of the Final The-Critical Removal Action Work Plans for the **Waste-Receiving Structure** at Site **30**, the Abandoned Wastewater Treatment Plant, Site 32 and for Site 39, **Oak** Grove Campground at the Naval **Air** Station Pensacola.

Please let us know if **you** have any questions or comments regarding the plans.

Sincerely,

EnSafe/Allen & Hoshall

Allison A. Dennen for
Henry H. Beiro
Task Order Manager

Enclosures

cc: **Mr. Bill Hill**, SOUTHNAVFACENGCOCM without enclosure
EnSafe/Allen & Hoshall file without enclosure
EnSafe/Allen & Hoshall Pensacola file without enclosure

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
TECHNICAL REVIEW AND COMMENT
DRAFT REMOVAL ACTION WORK PLANS
SITE 32, WETLAND 80; SITE 39
NAVAL AIR STATION (NAS) PENSACOLA
PENSACOLA, FLORIDA

SITE 32, WETLAND 80:

Comment:

1. If the purpose of the sampling for waste characterization during the pre-removal stage is to determine whether the sludge is nonhazardous (below TCLP levels), then one composite sludge sample from each of the three containers is not considered adequate. Discrete (non-composite) samples are recommended to prevent dilution of chemicals at "hot spots". Specifically, discrete samples should be collected at the four corners of the Imhoff Tank, at the four corners and the middle of the Sludge Beds, and at the area of highest possible contamination in the Chlorine Contact Chamber.

RESPONSE

No samples can be collected from the Imhoff tank during the pre-removal stage due to limited access to its contents. Samples will be collected after the tank is partially demolished. Four discrete samples will be taken based on the condition of the tanks contents after partial demolition allows a better inspection. Due to the design of the Imhoff tank (its bottom half slopes toward the center to concentrate sludge) sampling at the four corners is not physically possible.

Five discrete samples will be taken from the sludge-drying beds. The exact location of these samples will be determined according to the SW 846 method, which prescribes a random sampling scheme for large areas with no evident stratification.

One sample is to be taken in the chlorine contact chamber between the ~~first~~ and second baffle, where most settling would be expected to have occurred.

Comment:

2. The sludge in the three containers is only approximately **six** inches to one foot thick (conversation with Henry Beiro, June **13, 1994**) thus it is acceptable only to sample the surface. However, if the sludge is thicker, then additional samples at depth are warranted.

RESPONSE:

There **is** no sludge in the ~~sludge-drying~~ bed. Instead the material appears to be sand and gravel. The thickness until, reaching what was considered natural soil, is approximately **4** feet. When these samples were taken at discrete locations, they were composited vertically from **0** to **4** feet. In the ~~chlorine~~ contact chamber, the sludge was judged to be approximately **1** foot thick, therefore **only** one sample was necessary. **No** sampling will be possible from the Imhoff tank during the ~~pre-removal~~ stage due to limited access to its contents. Samples will be collected after the tank's partial demolition. Four discrete samples will be taken based on the condition of its contents and sludge thickness after partial demolition allows a better inspection.

* Note that these samples are being collected only to determine hazardous waste characteristics for disposal, not to **assess** risk.

SITE 39

Comment:

1. Abandonment of the shallow monitoring well ~~from~~ the **center** of the area of soil removal should be conducted **according** to Rule **17-532.440**, F.A.C.

RESPONSE:

Agreed, the shallow monitoring well in the center of the soil removal area will be abandoned according to Rule **17-532.440**, **F.A.C.** Layne Environmental, **drilling** subcontractor, will obtain the proper permit and perform the well abandonment.

Comment:

2. During the Remedial Investigation, the monitoring wells need to be resampled due to high levels of turbidity. It is recommended that the wells **are** sampled using Quiescent Sampling (low flow purging using a peristaltic pump with the flow rate of about one liter per minute and waiting up to a maximum of six hours to sample at a low flow rate using a peristaltic pump. Turbidity measurements (using a turbidity meter) should be taken in conjunction with the metals sampling.

RESPONSE

Agreed, all wells at Site **39** were resampled from June **14** to **17, 1994**. Peristaltic pumps were used for low-flow purging and sampling. The turbidity was checked during purging and sampling with a Horiba Model **U-10** Water Quality Meter.

Comment:

3. Surface soils **are** considered by FDEP to be from 0 to **2** feet below land surface. While it is acceptable to sample soils from 0 to **1** foot for **Risk** Assessment to be consistent with EPA; **all** remediation for surface soils should be from 0 to 2 foot unless soil contamination is limited to the upper foot. As per conversation with Henry Beiro (June 13, 1994) soil removal will not solely remove just one foot of **soil**, but to the full extent of stained soil or until **shallow** groundwater (approximately 3 feet bls) interferes with further removal.

RESPONSE:

The removal action at Site **39** is to be carried **out** to protect the groundwater beneath the site from contamination leaching from the **soil** above. The **soil** does not present an excess risk to human health and risk is not the driving factor in the removal. However, the removal action will not be limited to **only** the top foot of soil but will remove all stained soil **down** to the shallow groundwater if **necessary**.