



Lawton Chiles  
Governor

# Department of Environmental Protection

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Virginia B. Wetherell  
Secretary

April 28, 1995

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NAS PENSACOLA  
5090.3a

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Mr. Bill Hill  
Code 1851  
Southern Division  
Naval Facilities Engineering Command  
P.O. Box 190010  
North Charleston, South Carolina 29419-0068

RE: 2nd Edition of Draft Remedial Investigation (RI)  
Report, Site 1 (Sanitary Landfill), Naval Air Station  
Pensacola.

Dear Mr. Hill:

I have completed the technical review of the subject document, dated December 9, 1994 (received December 14, 1994). This RI is an updated version to the first edition, dated January 1994, and includes results from the June and July 1994 sediment, surface water, and groundwater samples (Quiescent sampling technique). The following comments, including the enclosed Memorandum to me from Ms. Jane Fugler, should be addressed before the document is considered final:

1. If the major addition of the updated Draft RI was inclusion of the 1994 data, then why was a whole new document submitted instead of just errata sheets/RI Addendum? The cost/benefit of these types of decisions should be discussed in partnering meetings.

Section 8:

2. Table 8-<sup>6</sup>~~7~~: The detection levels for sediments are above the Sediment Screening Value (based on effects levels and CLP PQL) agreed upon at the February 1994 Tier I Partnering Team meeting in Atlanta.

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repeatedly requested for many other sites since July 1994 and has not been provided.

9. The Florida Water Guidance Concentration for vanadium (49 ug/l) should be included in all relevant tables.

Baseline Risk Assessment:

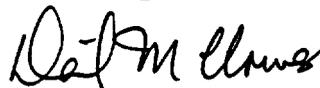
10. Page 10-5: As stated many times before for previous documents, with the inclusion of the inhalation pathway in the calculation of RGOs/Cleanup Levels, FDEP utilizes  $1E-6$  for carcinogenic Chemicals of Concern (COCs) and 1.0 hazard quotient for non-carcinogenic COCs as default criteria. Therefore, the cancer risks and hazard quotients of the Chemicals of Potential Concern (COPCs) above these levels should be renamed COCs, and the soil, sediment and groundwater pathways included in the Feasibility Study as areas of possible remediation.

Responses to FDEP Comments of 1st Draft RI:

11. Comment No. 2: The decision to consider the landfill as homogeneous; and thus, not to proceed with delineation of soil contamination "hot spots" should be decided based on a cost benefit analysis, which considers the cost benefit of capping the whole 80 acre landfill compared to delineating the "hot spots" and then placing caps over them or removing them. In summary, treating the landfill as homogeneous may decrease assessment costs, but may increase remediation costs above the assessment cost savings.

If I can be of any further assistance with this matter, please contact me at (904) 488-3935 or (904) 921-9989.

Sincerely,



David M. Clowes, P. G.  
Remedial Project Manager

Florida Department of  
**Environmental Protection**

**Memorandum**

**TO:** David Clowes, **DOD** Facilities **Technical** Review  
**THROUGH** Jim Crane, Bureau of Waste Cleanup JJC  
**FROM:** Jane Fugler, Hazardous Waste Sites Technical **Review** JK  
**DATE:** April 11, 1995  
**SUBJECT:** **Risk** Assessment Review for **NAS** Pensacola Site 1

I have briefly looked at the main portion and reviewed the **risk** assessment portion of the December 9, 1994 "Draft Remedial Investigation Report for Site 1, **NAS** Pensacola". I do not recommend concurrence with the no further actions that are proposed **until** the following concerns are addressed.

1. Section 4 notes that the State's species-of-concern habitats were present, but says nothing of whether the species were observed. There is no discussion of plants. **Also**, an osprey nest was observed .5 miles east of Site 1, Site 1 could be within the feeding range of the osprey.
2. On page 5-9, ¶ 2 states the **soil** samples were collected 1 - 2 feet below the surface in a stream. 0-1 feet would be more appropriate and indicative of what humans and wildlife (such as benthic organisms) could be exposed to.
3. On page 5-25, it states the water was injected during the drilling of a monitoring well due to running sands and then a boring sample was collected. The **quality** of **this** sample would be suspect.
4. A cursory look at the lab data finds that the detection limits may not be acceptable. For example, the detection limit for benzene in the groundwater analyses ranged from 2 - 10 ppb, which exceeds the state's guidance concentration of 1 ppb.
5. No laboratory data was included in Appendix H for the 1994 sediment and **surface** water samples.

Human Health **Risk** Assessment

6. Since this document was written new **Risk** Based Concentrations have been issued by **EPA** (March 7, 1995) and new Soil Cleanup Levels, by **FDEP** (April 5, 1995). These values should be applied for any additional assessments that may be conducted.
7. On page 10-34, it states that no available **risk** information is justification to eliminate a CPSS, EPA's Risk Assessment Guidance suggests grouping chemicals by class and applying **known risk** information of chemicals within the class for this situation.

**MEMORANDUM**

**David Clowes, Technical Review Section**

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8. Figure 4-4 shows several waterbodies within, adjacent and near Site 1. These should all be included in the human health and ecological risk assessments.

9. In Table 10-14, some of the 95% upper confidence limits (UCLs) were significantly lower than the maximum level of contaminants detected. It appears that these hits are hot spots and not outliers. It is recommended that since this landfill is so large and it is easy to distinguish portions by age, that the portions should be individually assessed. This is supported with the attached letter from Dr. Roberts. This reevaluation will probably change the future resident and onsite worker risks with soils from what is currently calculated.

10. In tables 10-2 and 10-18 some of the parameters are incorrect. The following should be used:

	<u>onsite worker</u>	<u>resident adult</u>	
Ingestion rate	50 mg/d	20 mg/d	-
Exposure duration	25 y	30 y	-
AT-N	9,125 d	10,950 d	-
Adherence factor	6 mg/cm2	-	.2 mg/cm2

11. What water is used to irrigate the golf courses to the east? Is this area covered in a different site?

Ecological Risk Assessment

12. The risk assessment (RA) document should be a stand-alone document, since it is usually reviewed by someone other than the Project Manager. Therefore, the following information is expected in a RA, which was not included here:

- a. A list of the state's threatened and endangered (T & E) species expected to be found at this site;
- b. A list of the aquatic and T & E species observed at this site;
- c. A data summary table for all contaminants detected in each media and that contains the frequency of detection, range of detects, average concentration and background concentration (from site specific studies);
- d. A brief sentence of which guidances were used for this RA and any deviations from those guidances;
- e. The environmental setting;
- f. Contaminant fate and transport mechanisms that may exist at the site;
- g. Ecotoxicity associated with contaminants and likely categories of receptors that could be affected; and
- h. The complete exposure pathways that may exist at the site from contaminant sources to receptors that could be affected.

**. MEMORANDUM**

**David Clowes, Technical Review Section**

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13. The ~~most~~ recent draft from **EPA** September **26, 1994** "~~Ecological Risk Assessment~~ Guidance for Superfund: Process for Designing and Conducting Ecological ~~Risk Assessments~~" discusses the steps needed for a RA

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