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LETTER AND COMMENTS FROM FLORIDA DEPARTMENT OF NATURAL RESOURCES REGARDING REVIEW OF ECOLOGICAL ASSESSMENT MEETING SUMMARY OPERABLE UNIT 1, 2 AND 7 NAS PENSACOLA FL
1/19/1993
FLORIDA DEPARTMENT OF NATURAL RESOURCES

INFO

Virginia B. Wetherell
Executive Director

FLORIDA DEPARTMENT OF NATURAL RESOURCES

Marjory Stoneman Douglas Building
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January 19, 1993

Mr. Cliff Casey
Department of the Navy
Southern Division
Naval Facilities Engineering Command
Code 18212
P.O. Box 10068
Charleston, South Carolina 29411-0068

RE: 1. Ecological Assessment Meeting Summary
2. *Technical Memorandum, Ecological Assessment Methodology, Operable Units 1, 2, and 7*
3. *Technical Memorandum, Human Health Risk Assessment Methodology, Operable Units 1, 2, and 7*
4. *Report on the Aquatic Macroinvertebrate and Fisheries Sampling if Rowell Creek*

Dear Mr. Casey,

We have had a chance to review the above reference documents and provide our comments.

Ecological Assessment Meeting Summary

We are disappointed that the Installation Restoration Program (IRP) for the Naval Air Station, Cecil Field Superfund site will not include the surface water bodies (streams and lakes) as a separate operable unit. We understand that the IRP is designed for the clean-up of specifically identified hazardous waste sites at the station. We also are aware that the entire naval air station has been placed on the National Priorities List (NPL) due to the various Potential Sources of Contamination (PSC) at the station. Our perception of the air station is that the entire area is of potential concern.

We realize that the surface water bodies receive runoff from areas of the base which are not identified as PSCs. However, many of these areas, along with the identified PSCs may impact the surface water system. As the multiple possibilities of various contaminants may have degraded the surface water and sediment of the streams and lakes, the surface water system may itself be a PSC.

The proposed study of certain areas of the creek, related to a specific Operable Unit (OU) may or may not identify that OU as a source. Yet elevated levels of contamination above the Applicable or Relevant and Appropriate Requirements or at levels injurious to

biota may still be present, yet not related to a the specific PSC in question. If this were the case, the naval air station would still likely be the source of contamination as the majority of the stream system's headwaters originate at the station.

Technical Memorandum, Ecological Assessment Methodology, Operable Units 1, 2, and 7

1. Section 3.0 (Waste Sites and Operable Units)

   It is proposed that an ecological assessment will be performed for each operable unit, and placed in interim documents. These will then be incorporated into a Baseline Facility Ecological Assessment. We agree it is important to develop an ecological assessment for the facility, and in some cases an individual eco-assessment for a particular site will be adequate. However, many of these sites are in close vicinity to each other, and may impact the same areas of the aquifer, or surface waters. Due to this possibility, a duplication of sampling may occur which could prolong the investigation for the eco-assessment. This is especially true of the surface water bodies at the facility. By investigating the streams and lakes as an operable unit, the potential for duplication could be reduced.

2. Figure 4-1 through 4-4

   We are unclear in these charts of what is meant by ingestion vs. ingestion of food. Does ingestion mean ingesting of the media (i.e., soil; surface water; sediments? Does ingestion of food mean eating organisms which may have been impacted by the media? These should either be defined in the text, or in a legend for each Figure.

   Also, the figure needs to denote that exposure is possible for some of the other receptors defined in the figure, other than those already defined. These are:

SOILS

	Terrestrial Wildlife	Plants	Amphibians	Terrestrial Invertebrate
Ingestion				■
Ingestion of food		■	■	

a. A terrestrial invertebrate can ingest soils while foraging from plant life or in the soil.
b. Plants can uptake contaminants through the soils and groundwater.
c. Amphibians can ingest organisms possibly impacted from the soils.

SURFACE WATER

	Terrestrial Wildlife	Plants	Amphibians	Terrestrial Invertebrate
Ingestion		▮		▮
Direct Contact	▮	▮		▮
Ingestion of food		▮	▮	

a. Aquatic plants come in contact with the surface water, and ingest it through roots and leaves.
b. Terrestrial wildlife will come in contact with the surface water when wading or swimming.
c. Amphibians will eat organisms which ingest or are in contact with the surface water.
d. Some terrestrial invertebrates lay their larvae in the water, or their larvae mature in the water.

SEDIMENTS

	Terrestrial Wildlife	Plants	Amphibians	Terrestrial Invertebrate
Ingestion		▮		▮
Direct Contact		▮		▮
Ingestion of food				

a. Aquatic plants come in contact with the sediments, and ingest through roots in the sediment.
b. Some terrestrial invertebrates lay their larvae in sediments.

3. Section 5.2 (Comparison With Background)

This section states ".....background concentrations measured in samples taken from areas that have not been influenced by hazardous waste sites at NAS Cecil Field.

These should be referred to as reference comparisons. Due to the potential from unknown hazardous sources, the reference levels could be too high for a good comparison. If background comparisons were needed, they should be taken from an area similar to that at NAS Cecil Field, but not influenced by the NAS.

4. Section 5.3 (Analytes Considered Non-Toxic)

Aluminum and iron will not be analyzed for in soils and sediments as they are natural components of soil. This is true. However, they should be measured due to high levels that may migrate into the surface water bodies where they can be toxic.

5. Figure 6-1 (Phased Approach for Assessment of Risk to Aquatic Receptors)

Under Phase II (Potential Method) - Ecotoxicity Assessment, it should say sediment **and** water toxicity test, not "or." One should not be excluded from the other.

6. Section 6.3.2.1 (Sediments)

The last paragraph of this section discusses bioaccumulation tests of fish and invertebrates. Plant life also should be included for bioaccumulation testing.

Technical Memorandum, Human Health Risk Assessment Methodology, Operable Units 1, 2, and 7

Section 3.0 (Methodology for the Selection of Chemicals of Concern)

This section states that sediments will not be considered for human health risk assessment. If surface water is a factor for fisherman, and swimmers, then sediments would also be of concern, especially for swimmers and waders.

Report on the Aquatic Macroinvertebrate and Fisheries Sampling of Rowell Creek

1. Section 2.1 (Physical and Chemical Characteristics)

   This section states the waster depth was "recorded at intervals." The document should denote the interval for this event, or note if it was the same as the interval (2 feet) for the current velocity measurements.

   Also, why were the recorded depths at each interval summed and meaned for an average water depth? Each individual depth could be significantly related to other sampling sediment; benthic; etc.)

2. Section 3.1.1 (Station BIO-1)

   This section discusses a portion of Rowell Creek as being channelized. Was Station BIO-1 in the channelized potion of the stream, or in a natural location? If in a natural location, was it upstream or downstream from the channelized area, and how far from the channelized portion was it? If the station was not in a natural area, or too close to the channelized section, then it may not provide an adequate reference.

We appreciate the opportunity to be involved in the investigation and remediation plans at NAS Cecil Field. Should you have any questions, please contact me at (904) 488-7454.

Sincerely,

John Mitchell
Project Manager
Office of Policy and Planning

cc: Pam McVety, FDNR
Lynn Griffin, FDER
Eric Nuzie, FDER
Jim Lee, DOI
Waynon Johnson, NOAA
John Dingwall, USN
James Hudson, EPA