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NAS CECIL FIELD  
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LETTER AND CLARIFYING COMMENTS FROM U S NAVY REGARDING FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATIONS COMMENTS TO TECHNICAL  
MEMORANDUM FOR SUPPLEMENTAL SAMPLING OPERABLE UNITS 1, 2 AND 7 NAS  
CECIL FIELD FL  
1/25/1993  
NAS CECIL FIELD

5090  
Code 1852

JAN 25 1993

Mr. Eric Nuzie  
Florida Department of Environmental Regulation  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Subj: TECHNICAL MEMORANDUM FOR SUPPLEMENTAL SAMPLING AT  
OPERABLE UNITS 1,2 AND 7 - NAS CECIL FIELD

Dear Mr. Nuzie:

Your Response to Responses letter of 14 December 1992 regarding the  
Technical Memorandum for Supplemental Sampling for OU's 1,2 and 7  
were received by this Command on 24 December 1992. Enclosed are  
the Navy's position and clarifying statements.

Should you have any questions, please contact Mr. Cliff Casey, Code  
1852, at (803)-743-0561.

Sincerely,

J. B. MALONE, P.E.  
Head, Installation Branch  
Restoration 1 Branch

Encl:

(1) Position and Clarification Statements

Copy to:

USEPA (James Hudson) (w/encl)  
NAS Cecil Field (Code 20IR) (w/encl)

Blind copy:

ABB-ES (Barry Lester)

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## NAVY POSITION AND CLARIFICATION STATEMENTS

### RESPONSES TO SECOND ROUND OF FDER COMMENTS ON U.S. NAVY'S TECHNICAL MEMORANDUM SUPPLEMENTAL SAMPLING FOR OU'S 1, 2 & 7 NAVAL AIR STATION, CECIL FIELD

#### Comment 3 - Response to Response

The U.S. Navy stated in their text that NEESA Level D (page 5-3, paragraph 2) was to be achieved in the laboratory analysis and yet, much of this data was qualified. While we are aware that Level D cannot be achieved in field samples, it is expected that any confirmatory soil and/or groundwater analysis performed at an EPA CLP laboratory will have minimal DQO qualifications.

#### **Response:**

The Navy is not sure of the meaning of this comment. There appears to be some confusion over the codes used to qualify the data. The U and UJ qualifiers refer to the minimum detection levels, when no contaminants are detected. The J qualifier signifies an estimated value. This flag is used when the mass spectral data indicates the presence of a compound below the stated quantitation limit. The "J" qualifier is not used with pesticide results.

Also, if a particular compound is detected at an Operable Unit, then all summary reports will contain values for that particular compound. This policy results in a large number of data points being qualified as U or UJ. Thus the large number of data values with U and UJ does not mean that the data has been compromised.

#### Comment 5 - Response to Response

It is FDER's position that obviously contaminated (stained) soils should be remediated and/or removed as soon as it is practical to prevent any further contamination at OU 2, Sites 5 and 7, due to the leachability potential of constituents present at those sites.

#### **Response:**

RCRA defines "immediate" as within six months, the Navy does not plan to perform a soil removal action within six months. However, the Navy is dedicated to expediting the remediation process for these sites.

Historical information reported the sizes of these sites of stained, and therefore contaminated, soil to be very small, about 50 to 100 feet in diameter. At this size it is practical to proceed with an immediate removal action. However, the first round of field work has indicated that the sizes of these sites may be much larger than previously believed, possibly one to two acres each. Due to the increased size of these sites it is prudent to

determine the most efficient and cost effective method for remediating before beginning any remedial action.

In addition these sites have existed for twenty to forty years and it is therefore not likely that much, if any, active contaminant migration is still occurring. The Navy proposes to delay removal action only until after the next round of investigations in which the actual size of each site will be determined.

The Navy has selected several potential treatment technologies (including in-situ biological) that will be evaluated as part of the next investigation. The Navy plans to begin the Feasibility Study before the completion of the Remedial Investigation, thus expediting the remedial action by providing a comprehensive approach to all the contamination problems at the site.

#### Comment 8 - Response to Response

FDER recognizes the U.S. Navy as the lead agency under the Federal Facilities Agreement. However, if the Navy is going to make unilateral decisions with respect to the placement and depth of monitoring wells, please be aware of the Department's position with regard to the degree of groundwater contamination. Monitoring well CEF-1-8D and proposed monitoring well CEF-1-14D have screened intervals that begin at 52 feet below land surface (bls) and 50 feet bls respectively. No monitoring wells at OU 1 have a screened interval between 16 feet bls and 29 feet bls. Therefore, FDER will assume that due to the site's lithology, hydraulic parameters, and contaminant density, the groundwater could be contaminated to at least 29 feet bls if your 30 feet bls plus screened wells show no contamination.

#### **Response:**

The Navy concurs with FDER that it is possible for contamination to exist in any area or at any depth that is not directly sampled. At OU 1, since every depth can not be sampled directly, the Navy has tried to reach a decision regarding sampling intervals using a reasonable common-sense approach.

The Navy plans to install wells at OU 1 at three depths; shallow wells (about 5 to 15 feet bls), intermediate wells (about 50 to 60 feet bls), and deep wells (greater than 90 feet). The first water bearing zone begins at approximately 5 feet bls and extends to 25 or 30 feet bls. About 25 feet bls an interfingering unit of clay and clay sand is present. Each layer is approximately one inch thick. The sum effect of the interfingered layers produces a confining layer with a five to eight foot upward head difference between the lower and upper zones. The shallow wells are designed such a that the screens intercept the water table and extend down to about 15 bls. The shallow wells should detect any floating contaminant. The intermediate zone varies across the site but

generally begins about 30 feet bls and extends to a dense clay unit at 60 to 80 feet bls. The contaminants, most likely to be encountered in this zone are those contaminants heavier than water, therefore the intermediate well screens have been placed in the lower portion of this second zone to detect these contaminants.

The intermediate well depths will vary depending on the lithology encountered. The depth used in the Technical Memorandum, about 50 to 60 feet bls with a ten foot screen, is an estimated depth. The wells will be finished at a depth just above the dense clay unit, which forms the base of the surficial aquifer. If any contaminants heavier than water exist in the intermediate zone, they should be concentrated at this depth. The deep wells are installed into a zone just below the clay layer described above to detect if any contamination has migrated through this barrier unit.

#### Comment 9 - Response to Response

Similarly, since the proposed monitoring well CEF-1-14D is to have a screened interval that begins at 50 feet bls, FDER will assume the groundwater could be contaminated to at least 49 feet bls, if monitoring well CEF-1-14D is contaminant free.

#### Response:

Refer to the response for Comment 8.

#### Comment 10 - Response to Response

FDER agrees that monitoring well CEF-1-13s will address the lateral extent of possible contamination south of Site 1. However, there is approximately 250 feet between monitoring well CEF-1-5s and the location for monitoring well CEF-1-13s. We stand by our proposed position that a shallow monitoring well should be installed south-southwest or southwest of Site 1 (preferably equidistant between the two above referenced wells) to determine the lateral extent of TAL and TCL compounds.

#### Response:

Agree. An additional shallow well will be installed between CEF-1-5s and CEF-1-13s.

#### Comment 11 - Response to Response

Figures 5-5, 5-7, and 7-2 show the outline for Site 3. FDER's comments were made with respect as to why the Navy does not include all of the Site within the site screening grid. As it appears, the proposed screening grid excludes some of the area of potential contamination as noted by the Navy's boundary for Site 3, in the above referenced figures.

**Response:**

Results from the first round of sampling indicate the contamination does not extend to the southwest area of site 3. However, the Navy proposed an iterative site screening procedure that begins at a known contaminated area and radiates outward about 40 feet during each step until no significant contamination is detected. This process will insure that all contamination is detected without excessive sampling in clean areas.

Comment 19 - Response to Response

Similarly, Figures 5-25 and 7-6 show the outline for Site 16. Again, not all of the area of contamination, as noted by the boundary of the site, is included in the proposed sampling grid.

**Response:**

Figure 7-6 shows the initial screening locations. If contamination is found at these locations further screening will be conducted radially outward until no significant contamination is detected.