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NAS WHITING FIELD  
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LETTER REGARDING REVIEW AND COMMENTS ON THE PHASE 2A GEOPHYSICAL  
SURVEY TECHNICAL REPORT NAS WHITING FIELD FL  
4/13/1993  
U S EPA REGION IV



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REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

APR 13 1993

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Certified Mail  
Return Receipt Required

Captain James Eckhart  
Commanding Officer  
Naval Air Station Whiting Field  
Milton, Florida 32570-5000

Re: Remedial Investigation Phase II-A  
Geophysical Survey - Technical Report, February 1993  
Naval Air Station (NAS) Whiting Field  
Milton, Florida

Dear Captain Eckhart:

The Environmental Protection Agency (EPA) has completed its review of the above referenced report. This review is provided to the Navy under the consultation provisions for the Installation Restoration Program (IRP) specified in Section 211 of CERCLA/SARA. Overall, the report is well done. However, EPA has various concerns regarding the interpretations of data and the conclusions based on those interpretations. These concerns are addressed in the site Specific Comments section of this review document.

If you have any question regarding these comments, please contact Mr. Robert H. Pope, of my office, at (404)347-3016.

Sincerely yours,

Jon D. Johnston, Chief  
Federal Facilities Branch  
Waste Management Division

cc: Kimberly Queen, SouthDiv  
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James Crane, FDER

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EPA COMMENTS ON REMEDIAL INVESTIGATION PHASE II-A  
GEOPHYSICAL SURVEY - TECHNICAL REPORT  
FEBRUARY 1993

GENERAL COMMENTS

1. The stated objectives of the geophysical surveys at NAS Whiting Field were to characterize landfill materials, define the lateral and vertical extent of landfill boundaries, and to identify potential plume migration pathways. In general, the lateral extent of wastes and disturbed soils was successfully mapped at most sites. However, two of the main goals of the study were unsuccessful. The vertical extent of wastes was not determined at any site and no plume migration pathways were identified. The failure of the DC resistivity survey to determine vertical extent is plausibly explained as a result of the heterogeneity of the wastes. However, no acceptable explanation is offered for the failure of plume migration pathway identification. In addition, there is no mention of attempts to identify plume pathways at the various sites.
2. If further work is done at NAS Whiting Field trying to define the vertical extent of wastes, an alternative method should be considered. One technique with a history of success is time-domain electromagnetic (TDEM). TDEM uses a larger time range of measurement. The advantage of TDEM is a higher sensitivity and an improved vertical resolution. EPA recommends TDEM be considered in case of future work.

SPECIFIC COMMENTS

1. On page 2-3, section 2.1.2, it is indicated that physical barriers at a site can limit complete coverage of the investigation area. While this is a common problem and one that cannot always be effectively dealt with, it needs to be taken into account when interpreting results and making conclusions.
2. On page 3-32, section 3.2.7, it is stated that "the western boundary of these landfills can only be inferred" due to the presence of the boundary fence. It is obvious from Figures 3-29 thru 3-32 that the waste continues past the current boundary fence and that the survey area is truncated by the fence. It is entirely conceivable that the current fence cuts across the old landfill. Due to this data gap EPA does not believe that the lateral extent of Site 16 has been successfully determined to the west. It is recommended that

the survey be continued on the western side of the fence in order to correctly define the lateral extent of the waste to the west.

3. Also on page 3-32 and continued on page 3-39, section 3.2.7, it is indicated that isolated anomalies were located on the eastern edge of Site 16. It was apparently determined that these anomalies were a result of uncontrolled dumping and therefore, not within "the scope of this project." Whether the disposal was controlled or not is not the concern of the investigators. All waste on the facility is within the scope of the RI/FS. Therefore, the survey was prematurely discontinued to the east. The survey should have continued until the site boundaries were reached and/or no further anomalies were detected.