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NAS WHITING FIELD
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LETTER REGARDING REVIEW AND COMMENT ON THE PHASE 2A REMEDIAL
INVESTIGATION SOIL GAS SURVEY TECHNICAL REPORT NAS WHITING FIELD FL
5/12/1993
U S EPA REGION IV



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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

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

MAY 12 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
Soil Gas Survey - Technical Report, March 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 presentation of data and the methodology. The methodology concerns are addressed in the General Comments section of this review document and the presentation concerns are addressed in the site Specific Comments section.

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

cc: Kimberly Queen, SouthDiv
NAVFACENGCOM

James Crane, FDER

James Holland, Public Works Division
NAS Whiting Field

Waynon Johnson, NOAA

John Mitchell, FDNR

Lynn Griffin, FDER

James Lee, DOI

EPA COMMENTS ON REMEDIAL INVESTIGATION PHASE II-A
SOIL GAS SURVEY - TECHNICAL REPORT
MARCH 1993

GENERAL COMMENTS

The report is well-written and presents the soil gas survey data and interpretations based upon that data in a logical manner. However, the stated purpose of the soil gas survey at Whiting Field was to identify potential source areas and to determine the areal extent of soil gas contamination at various selected sites. The first of these seems to have been fully accomplished, but at several sites the complete areal extent of contamination seems to have either been outside the grid area or to have been undeterminable due to structural obstacles (i.e. buildings). Full explanations of the circumstances of incomplete contamination determination need to be given with the descriptions of the sites.

In neither the Soil Gas Survey - Technical Report nor in Phase II-A Workplan of the Remedial Investigation is it clearly explained why the results of the soil gas survey were reported in terms of relative ion counts, as opposed to actual concentrations in either parts per million (ppm) or parts per billion (ppb). An explanation is needed as to why the relative ion count is believed to more accurately characterize the nature and extent of contamination at the site as opposed to presenting the actual contaminant concentrations. In addition, it is not clear in the text how the 100,000 ion count was determined as the ion count "threshold" and why for some of the sites, the ion count threshold is either 10,000 or 85,000. Since ion counts were not listed for background conditions, it is not clear why three different ion count thresholds are used, nor why such a seemingly high number was selected.

SPECIFIC COMMENTS

1. Page ii, Table ES-1:

The frequency of detection for cycloalkanes and naphthalenes at sites 29 and 30 is listed as 19 of 71. On the right side of Table ES-1, the total number of detections was broken out into specific locations, with the total equalling the frequency of detections. However, the sum of the detections on the right side of the table equals 17, not 19. Similarly, the values for the frequency of detection of trichloroethene (TCE) at sites 5, 6, and 33 are 5 of 44 and 4 of 44. However, these values do not correspond to the sum of the detections on the right side of the table. These discrepancies should be clarified.

2. Page 1-4, Table 1-1:
On the right side of the table, there is a breakdown of proposed sampling points versus actual sampling points. However, nowhere in the document is there an explanation of fewer samples were taken at some locations and more at another location. While field conditions almost always require a change in plans, it is imperative that the reasons for changes be known and presented.
3. Page 2-3, Paragraph 5:
The text states that "the exposure time for the samplers at each site was determined." First, the exposure times should be listed either in the text or in table form. Secondly, the aforementioned statement implies that a different exposure time was used for each site. In order to make a straight line comparison of the contaminant concentrations at each site, it seems imperative that the same exposure time be used for all sites. Further information is required on this matter.
4. Page 3-2, Paragraphs 6, 7 & 8:
The text describes the various hot spots and extended areas of contamination. All text descriptions of elevated "hits" of contaminants should include the applicable ion counts. This is true for all text descriptions throughout the document, not just the North Field Hangar Maintenance Area.
5. Page 3-8, Paragraph 1:
The text states that "among the three extended area hot zones, two are with undefined boundaries"; however, it is not clearly shown on Figure 3-3 which boundaries are fully delineated and which are undefined. In fact, most of the figures do not distinguish between defined and undefined boundaries except figures 3-8, 3-9, 3-10, 3-14 and 3-19. Furthermore, the figures mentioned above should include the different types of boundary designations and their meaning in the legend.
6. Page 3-8, Paragraph 3:
The text mentions "five extended area hot zones." However, this number should be "four" as shown in paragraph 5 of the same page.
7. Page 3-8, Paragraph 7:
The text refers to building 2945 at site 29; however, all of the figures of site 29 show building 2995. This discrepancy should be clarified.
8. Figures 3-7, 3-9, 3-11 and 3-13:
For clarification, these figures should identify the wash rack, the hazardous waste storage area and Building 1406, as these items were referred to in the text.

9. Page 3-11, Paragraphs 1 & 2:
The text states that there are two single point hot spots in Site 30; however, only one single point hot spot is shown on Figure 3-9. This discrepancy should be clarified.
10. Page 3-11, Paragraph 4:
The text states regarding Sites 29 and 30 that "eight of the 71 sampling points at these two sites were reported to contain relative [tetrachloroethene] PCE ion counts greater than 100,000." However, Figure 3-10 states in the legend that the shaded area denotes an area of relative ion count greater than or equal to 10,000 and not 100,000. This discrepancy should be clarified.
11. Page 3-20, Paragraph 1:
The text refers to a single point hot spot located at Site 30; however, this single point hot spot is not shown on Figure 3-15. This discrepancy should be clarified.
12. Figures 3-13 and 3-19:
In Figure 3-13, ion counts are high on both the east and west sides of the South Field Maintenance Hangar and the corresponding plume is depicted as being continuous under the structure. However, in Figure 3-19, ion counts are also high on both the east and west sides of the hangar and the plume is not depicted as being continuous under the structure. These presentations of data and conclusions are not consistent and an explanation needs to be provided.