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NAS WHITING FIELD  
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LETTER REGARDING EVALUATION OF SUBSURFACE SOILS AT SITE 2 NAS WHITING  
FIELD FL  
6/25/1999  
HARDING LAWSON ASSOCIATES

June 25, 1999

2534-2021

Florida Department of Environmental Protection Agency  
Attention: Mr. Jim Cason  
2600 Blairstone Road  
Tallahassee, Florida 32301

**SUBJECT: Evaluation of Subsurface Soils  
Site 2, Northwest Open Disposal Area  
NAS Whiting Field, Milton, Florida  
Contract No. N62467-89D-0317/116**

Dear Mr. Cason:

Based on your review comments for the Site 2, Northwest Open Disposal Area, Record of Decision (ROD), Harding Lawson Associates (HLA) conducted an evaluation of the effects of residential exposure to the subsurface soils at Site 2, NAS Whiting Field, Milton, Florida.

Table 1 presents the subsurface soil analytical results and compares contaminant concentrations to the Florida Soil Cleanup Target Levels (SCTLs). The data indicates Arsenic is the only contaminant exceeding the Florida SCTL for residential exposure. The Site 2 ROD, addresses exceedance of arsenic concentrations by recommending Land Use Controls for Site 2.

Based on the data presented in Table 1 and a comparison of contaminant concentrations to the SCTLs (Direct Exposure [residential and industrial] and Leachability) presented in Table 2 of Chapter 62-777, FAC, the conclusions and recommendations presented in the Site 2 RI report are still valid and subsurface soils do not pose a risk to human health. The chosen remedy, Land Use Controls, will ensure residential risk will not occur at this site. We recommend the wording in Chapter 62-785.680(2)(6) 1 and 2 be incorporated into the Land Use Controls.

If you have any questions or concerns about this report, please call us at (850) 656-1293.

Sincerely,

Harding Lawson Associates

  
Rao Angara

Task Order Manager



Eric Blomberg, P.G.

Senior Scientist

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**Table 1**  
**Summary of Analytical Results for Subsurface Soils**

Site 2, Northwest Open Disposal Area  
NAS Whiting Field  
Milton, Florida

| Locator                                     | Range of<br>Detections | Background<br>(2 x Mean of<br>Facilitywide<br>Subsurface<br>Soil) | USEPA Region III<br>RBCs<br>(Industrial) | Florida Soil Cleanup<br>Target Levels <sup>1</sup><br>(Residential/Industrial/<br>Leaching) |
|---|------------------------|---|--|---|
| <b><u>SVOCs (ug/kg)</u></b>                 |                        |   |  |   |
| 2-Methylnaphthalene                         | 810 - 940              | NA  | 4,100,000                                | 80,000/560,000/6,100  |
| Phenanthrene                                | 520                    | NA  | —  | 2,200,000/30,000,000/250,000  |
| <b><u>Pesticides &amp; PCBs (ug/kg)</u></b> |                        |   |  |   |
| Aroclor-1260                                | 320                    | NA  | 2,900                                    | —/—/—   |
| Dieldrin                                    | 4                      | NA  | 360                                      | 70/300/4  |
| Alpha-Chlordane                             | 3.3                    | NA  | 16,000                                   | 3,00/12,000/9,600   |
| Gamma-chlordane                             | 3.1                    | NA  | 16,000                                   | 3,100/12,000/9,600  |
| <b><u>Inorganic Analytes (mg/kg)</u></b>    |                        |   |  |   |
| Aluminum                                    | 2,380 - 3,760          | 27,834  | 2,000,000                                | 72,000/**/SPLP  |
| Arsenic                                     | 0.37 - 0.54            | 6.2   | 3.8                                      | 0.8/4.62 <sup>2</sup> /29   |
| Barium                                      | 3.7 to 7.4             | 15.8  | 140,000                                  | 110/87,000/1,600  |
| Cadmium                                     | 0.17 to 0.24           | 0.92  | 1,000                                    | 120/800/63  |
| Calcium                                     | 687 to 1,820           | 444   | —  | —/—/—   |
| Chromium                                    | 3.0 to 3.6             | 22.8  | 6,100                                    | 210/420/38  |
| Copper                                      | 1.6 to 1.8             | 8.8   | 82,000                                   | 110/76,000/SPLP   |
| Iron  | 1750 to 2170           | 18,100  | 61,000                                   | 23,000/480,000/SPLP   |
| Lead  | 2.6 to 4.9             | 8.4   | 400                                      | 400/920/SPLP  |
| Magnesium                                   | 78.8 to 261            | 272   | —  | —/—/—   |
| Manganese                                   | 10.8 to 31.6           | 42.6  | 41,000                                   | 1,600/22,000/SPLP   |
| Potassium                                   | 104 to 138             | 181   | —  | —/—/—   |
| Sodium                                      | 137 to 154             | ND  | —  | —/—/—   |
| Vanadium                                    | 6.5 to 7               | 45  | 14,000                                   | 15/7,400/980  |
| Zinc  | 4.4 to 5               | 15.6  | 610,000                                  | 23,000/560,000/6,000  |

Notes: ug/kg = micrograms per kilogram.  
mg/kg = milligram per kilogram.  
NA = Not Applicable.  
\*\* = Contaminant not a health concern for this exposure  
<sup>1</sup> = Soil Cleanup Target Levels for Chapter 62-777, F.A.C (May 1999)  
<sup>2</sup> = FDEP approved site-specific cleanup goal