



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION III  
1650 Arch Street  
Philadelphia, Pennsylvania 19103-2029

Section: 2.01  
Site 20903-5640 (White Oak)  
Doc. #: 0027

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NSWC WHITE OAK  
5090.3a

July 25, 2000

Mr. Walter Legg  
Engineering Field Activity Chesapeake  
Washington Navy Yard, Building 212  
1314 Harwood Street, S.E.  
Washington, DC 20374-5018

Re: Draft Sampling and Analysis Plan for Site 3 (Pistol Range Landfill) Former Naval Surface Warfare Center (NSWC) White Oak

Dear Mr. Legg:

The United States Environmental Protection Agency Region III has reviewed the above report and has the following comments:

**GENERAL COMMENTS**

1. The draft Sampling and Analysis Plan (SAP) is incomplete. The work plan states that waste characterization and decontamination water samples will be collected, however, these samples are not included in the SAP. In addition, information, such as bottleware requirements and preservatives, are not included in the SAP.
2. The SAP does not contain information on waste characterization samples for excavated waste and decontamination water from truck and excavation equipment decontamination. Information that should be provided includes analytical methods, holding times, bottleware requirements, type of sample (i.e. grab or composite), sample preservation information, and number of samples or criteria on which the number of samples will be based. This information should be added to the text.
3. The SAP does not provide details concerning the confirmatory samples to be collected. Holding times, sample quantities, preservation, sample type (i.e. grab or composite), and bottleware requirements should be provided in a table. The table should be added to the text.
4. Procedures for sampling sidewalls of the excavation are not provided. Specific procedures for selecting sample locations vertically and horizontally on sidewalls should be added to the text.
5. The text should clarify whether this removal action is to be considered the final remedy for this site or just an interim removal action.

6. Section 1.0 states that severe erosion of the landfill by Westfarm Branch has occurred. Waste is present in the stream channel. The work plan calls for the diversion of the stream channel during excavation activities. Sampling of the sediment of the stream should be considered to ensure that contaminated sediments are removed, and to ensure that contamination is not mobilized by work in the stream channel.
7. A section delineating lines of authority and responsibilities of key individuals was not provided. This information should be added to the text.

## **SPECIFIC COMMENTS**

1. **Section 2.3, page 2-2.** This section states that if the concentration of a contaminant “significantly” exceeds its preliminary removal goals (PRGs), then additional excavation will be performed in that area. A later statement in this section indicates that excavation, sampling, and analysis will continue until no contaminants are detected at concentrations above PRGs, or until it is deemed impractical. These statements appear to be contradictory. The text should be revised to indicate that excavation and sampling will continue until no contaminants are detected at concentrations above PRGs, or until it can be demonstrated that further removal is impractical.
2. **Table 2-2.** This table provides a summary of the analytical methods to be utilized. The table states that contract laboratory statement of work (CLP SOW) OLM03.2 and CLP SOW OLM03.1 will be utilized for target compound list (TCL) organics analyses. The most recent CLP SOW for TCL organics is OLM04.2. The table should be revised.

In addition, the method cited for explosives is listed as SW-8330. The correct citation should be SW-846 Method 8330. The table should be revised.

Furthermore, EPA 900 is cited as the method of analysis for gross alpha and beta radiation. The correct methodology is SW-846 Method 9310. The table should be revised.

Confirmatory samples are not scheduled to be analyzed for total petroleum hydrocarbons (TPH). During the removal action at Site 4, petroleum hydrocarbons were visually present in the excavation. Analyses for TPH diesel and gasoline range organics (DRO and GRO) should be considered.

3. **Section 3.5, page 3-2.** This section details the quality control samples to be collected. According to the text, rinsate blanks are not required because disposable polyethylene sampling equipment will be utilized. According to the Master Quality Assurance Project Plan (QAPP) (Brown and Root, 1997) for the site (page 3-17), rinsate blanks not only check the quality of decontamination procedures, but are collected under representative field conditions and therefore measure potential contamination due to site conditions. In addition, disposable polyethylene bowls for sample homogenation do not exist. Therefore, stainless steel bowls

will be decontaminated, requiring rinsate blanks. For these reasons, analysis of rinsate blanks should be added to the text.

In addition, the text does not state the frequency of matrix spike/matrix spike duplicate (MS/MSD) sample collection. Information concerning the MS/MSD should be included in the text or in a table.

4. **Table 2-1.** This table provides the removal action PRGs. The rationale for contaminant selection is unclear. For example, 2-butanone was detected in soil samples at the site, yet it does not have a PRG. Conversely, 2-methylnaphthalene was not detected at the site, but this compound has a PRG. Consideration should be given for providing a PRG for all TCL organics, because the site is a landfill and the bulk of the waste is probably uncharacterized. If this is an interim removal action, the rationale for the contaminants selected should be provided, otherwise all contaminants analyzed should be included in the table.

In addition, the text and table do not provide the version of the EPA Region III risk-based screening concentration (RBC) table used to calculate the PRGs. The reference should be provided in the text.

5. **Figure 1-3.** This figure provides confirmatory sample locations. All except one of the samples is located more than 40 feet from the landfill boundary. Contaminants at the landfill boundaries have the greatest potential to migrate offsite. Westfarm Branch, at the toe of the western slope of the landfill, has a potential to erode into any contaminants left in place. Therefore, additional samples should be located at the limits of waste. Specifically, additional samples should be located at the toe of the western, northern, and southern slopes of the landfill.

In addition, the southernmost portion of the landfill was not included in the figure. According to the EE/CA for this site, the landfill extends south an additional 30 feet. The figure should be revised to include the entire landfill.

If you have any questions, please call me at (215) 814-3369.

Sincerely,



Yazmine J. Yap-Deffler  
Remedial Project Manager  
Federal Facilities Section

cc: Jeff Thornburg, MDE  
Steven Richard, GSA