



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

January 9, 2004

Curt Frye, Remedial Project Manager
U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1823-Mail Stop 82
Lester, PA 19113-2090

RE: Old Fire Fighter Training Area Work Plan for Soil Predesign Investigation, Naval Station Newport, Newport, Rhode Island

Dear Mr. Frye,

The Rhode Island Department of Environmental Management, Office of Waste Management has reviewed the Old Fire Fighter Training Area Work Plan for Soil Predesign Investigation, dated November 26, 2003. Attached are comments generated as a result of this review.

To date, as part of three separate remedial investigation studies and a source removal evaluation study over one hundred and thirty surface and subsurface soil samples have been collected at the site. The current submittal calls for the collection of one hundred and forty additional samples to fine tune the proposed removal action. The Office of Waste Management questions the need for the proposed extensive sampling effort. Typically, the true nature and extent of contamination is uncovered during the removal action and in many cases the estimates obtained during the design study are found to be inaccurate. This has been the case for the removal actions performed at Naval Station Newport. As an illustration, both the horizontal and vertical extent of contamination found at the Melville North Landfill did not agree with the estimates produced for the several removal actions conducted at that site. This disagreement was even observed at locations where preexcavation samples were taken.

Therefore, in consideration of the above, the Office of Waste Management recommends that the proposal be scaled back to a limited sampling effort. The monies saved by this course of action can be used for the remediation of the site and /or investigation of other sites.

If the Navy has any questions concerning the above, please contact this Office at 401-222-2797, ext 7111.

Sincerely,

A handwritten signature in cursive script that reads "Paul Kulpa".

Paul Kulpa
Office of Waste Management

cc: Mathew DeStefano, DEM OWM
Richard Gottlieb, DEM OWM
Kymberlee Keckler, EPA Region I
Amanda Cerise, NSN

1999

**Comments on
Work Plan Soil Predesign Investigation
Old Fire Fighting Training Area**

1. General Comment

The Office of Waste Management disagrees with the need to conduct an extensive sampling effort at the site. Specifically, the studies performed to date have demonstrated that contamination exists at the site and these studies have delineated the general areas, which will require remediation. During the removal action the actual extent of contamination will be uncovered. Further, as part of this action, excavations or test pits will be dug beyond the area that is thought to be contaminated, in order to ensure that remedial objectives have been met. This has been found to be necessary, since in general, contaminant distribution is heterogeneous in nature and in many cases contamination has been found to extend beyond that delineated by the predesign studies.

Performing an extensive study, especially in the central portion of the site where free product is known to exist, is unlikely to change the course of the removal action in this area. Therefore it is recommended that the proposed effort be primarily limited to the western portion of the site and the Navy should reduce the number of samples taken in the central and eastern portions of the site.

2. General Comment

The Navy has indicated that due to budgetary considerations the removal action may be conducted in two construction seasons. In the first season the mounds will be removed from the site and the area will be leveled. In the second season the subsurface soils will be removed. If the Navy intends to conduct the removal action in two seasons it is strongly recommended that the proposed soil borings in the mounds be drilled after the mounds are removed. In this manner the Navy can adjust the proposed drilling locations based upon discoveries made during the removal of the mounds. This would affect the following soil boring locations; SB # 406, 411, 412, 415, 416, 417, 418, 422 and 433.

3. General Comment

The current submittal calls for the installation of some soil borings in proximity to historic location of test pits, monitoring wells or other borings installed during the previous investigations. The work plan must stipulate that the lack of contamination in a new boring cannot be used to discount the fact that contamination was observed in an adjacent historical test pit, boring, monitoring well etc. That is, since contamination distribution is heterogeneous in nature, the lack of contamination at one location cannot be used to negate observations or test results from previous sampling efforts.

4. Section 1.0, Introduction

Page 1-2.

“Analyzing soil samples to determine disposal requirements and restrictions.”

The report notes that the proposed sampling effort will be used to determine disposal requirements and restrictions. A sufficient number of samples have been taken to determine general disposal requirements and/or restrictions for planning purposes. Further, the current constituent list is less than that used during the previous investigations and it does not include any different analytes, such as TCLP. Therefore, the predesign sampling effort will be of limited utility for waste disposal. Sampling for waste disposal will be done during the confirmatory sample phase when the waste piles are segregated and shipped out.

5. Section 3.2.1, Soil Samples Collected from Borings

Page 3-2.

“Continuous split spoon samples will be collected from each borings starting at a depth of two feet bgs to the top of bedrock or a maximum depth of 20 feet bgs.”

The mounds at the site are of considerable elevation with respect to the adjacent flat areas. Application of the above restriction would limit the investigation of the mounded areas. Therefore, the above must be modified as follows: Continuous split spoon samples in the flat areas of the site will be collected from each borings starting at a depth of two feet bgs to the top of bedrock or a maximum depth of 20 feet bgs. In the mounded areas the elevations of the hills will be taken into considerations so that the borings in the mounds are terminated at approximately the same depth as the rest of the borings at the site, (i.e. if the top of the mound is fifteen feet higher than the surrounding areas the maximum depth of the boring at this location will be thirty five feet.).

6. Section 3.2.1, Soil Samples Collected from Borings

Page 3-2.

“Continuous split spoon samples will be collected from each borings starting at a depth of two feet bgs to the top of bedrock or a maximum depth of 20 feet bgs.”

The objective of the investigation is to determine the extent of contamination. If contamination is observed at a particular boring location at the twenty-foot interval, deeper samples will have to be taken. Therefore, the above must be modified as follows: Continuous split spoon samples will be collected from each borings starting at a depth of two feet bgs to the top of bedrock or a proposed depth of 20 feet bgs. If contamination is discovered at the bottom of the boring the drilling will be extended deeper until clean soils are encountered.

7. Section 3.2.1, Soil Samples Collected from Borings
Page 3-2.

The proposal calls for the collection of soil samples at specified intervals. This is acceptable if the borings are homogeneous and there is no evidence of contamination. If contamination zones exist, samples should be preferentially taken from the most contaminated areas and/or from those areas needed to profile the site. As an illustration, if heavily contaminated soil is observed at the 14 –16 foot interval and not at 18-20 foot interval the Navy may wish to sample both intervals, (the dirty and the clean) in order to obtain information concerning contaminant depth. If the Navy acknowledges that the 14-16 foot interval is dirty and will require remediation, the Navy may elect to sample only the 18-20 foot interval to determine if contamination is present at that depth. The report must be modified to reflect these requirements.

8. Section 3.2.1, Soil Samples Collected from Borings
Page 3-2.

The report notes that samples will be analyzed for SVOCs, metals and TPH. This section of the report should clearly state whether the samples will be analyzed for the entire list of SVOCs and metals, or just a subset of these compounds. Further, this section of the report should include a table with the list of compounds for analysis.

9. Section 3.2.1, Soil Samples Collected from Borings
Page 3-2.

The report notes that site samples will be analyzed for TAL metals using standard laboratory measures. Field XRF is a low cost alternative to laboratory analysis. Accordingly the Navy may wish to evaluate the use of XRF to analyze these samples (with ten percent laboratory confirmatory analysis covering both low and high end samples).

10. Section 3.2.1, Soil Samples Collected from Borings
Table 3-2, Analytical Methods, Sample Preservation and Holding Time Requirements.

The Navy has proposed using EPA 8015 B to test for TPH. Please be advised that both light and heavy oils were dumped at the site. The proposed TPH test method is not capable of detecting the full range of petroleum compounds. Therefore, as has been done at other sites, including sites on the Navy base, two separate TPH test methods, (one for light and the other for heavy products), must be employed at the site.

11. Section 3.2.1, Soil Samples Collected from Borings
Table 3-2, Analytical Methods, Sample Preservation and Holding Time Requirements.

This table lists the preservation methods to be employed on the samples. Please be advised that EPA 5035 is required for lighter end petroleum fraction samples. Please modify the work plan to reflect this requirement.

**12. Section 4.3.1, Environmental Samples;
Page 4-5.**

All of the information obtained from the site will be placed in the Navy's GIS database. In order to avoid confusion it is recommended that the nomenclature for the boring location start at the last boring taken at the site in lieu of the proposed 400 identifier, (i.e. instead of OFFTA-SB-400, use OFFTA-SB-19).

**13. Section 4.13, Predesign Investigation Report;
Page 4-12.**

This section of the work plan must stipulate that in order to provide oversight, the regulatory agencies will be given a schedule of field activities and a tentative start date for the sampling effort. Since it is recognized that start dates and schedules are dynamic, one week notification is required prior to the actual start of field activities and when possible, twenty four hour notification is required for the cancellation of any activities. In addition, at the end of each week the Navy will fax or email a schedule of upcoming activities for the next week. As this procedure has been employed at other sites the Navy may wish to simply adopt the protocols, which have been previously implemented into this work plan. Finally, in a number of instances in the past the prior notification was provided late, due to confusion as to whether the Navy or the Navy's contractor would contact the regulatory agencies. In order to avoid this problem the work plan should clearly state which entity will provide the notification to the regulatory agencies.