



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

December 9, 2005

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: Comments on the Surface Warfare Officers School, Draft Focused Site Inspection  
Report, Naval Station Newport, Newport, Rhode Island

Dear Mr. Frye,

The Rhode Island Department of Environmental Management, Office of Waste Management has reviewed the Surface Warfare Officers School, Draft Focused Site Inspection, dated October 26, 2005. Attached are comments generated as a result of this review.

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

Sincerely,

  
Paul Kulpa  
Office of Waste Management

cc: Matthew DeStefano, DEM OWM  
Richard Gottlieb, DEM OWM  
Kymberlee Keckler, EPA Region I  
Cornellia Mueller, NSN

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**Comments on  
Draft Focused Site Inspection Report  
Surface Warfare Officers School**

**1. Section 1.2.3, Previous Site Investigation and History.  
Page 1-3.**

This section of the report notes that two earlier studies were performed. The report must note whether any samples were collected in these studies and if so the results of these sampling efforts must be included in the contaminant distribution section.

**2. Section 1.2.3, Previous Site Investigation and History.  
Page 1-3.**

During the construction of the SWOS building petroleum-contaminated soil was observed. This should be noted in the history section.

**3. Section 1.2.3.1, Coaster Harbor Island UST Remedial Investigation Report.  
Page 1-3.**

One of the functions of the Focus Investigation Study was to determine the source of contamination at SWOS. In order to discount the known releases from the USTs on the island additional details must be provided for these other potential sites. This information must include, but not be limited to, maps depicting the locations of all monitoring wells, soil samples, etc. for each source area, depth of observed contamination, type of contamination (heavy oil, light fuel oil, etc), maps depicting extent of known contamination, maps depicting location of known utilizes lines in these areas and at SWOS, storm drains, electrical lines, etc. In addition, specific concerns for each site must be addressed. As an illustration, for Structure 74 please depict the location of the underground utilities and note whether the storm drain at firefighter extend up into the contaminated zone of Structure 74, is there any evidence that fuel oil enter into the storm drain, were wells or borings taken along the length of the storm drain in the vicinity of Structure 74, the report notes that contamination was found slightly north of Structure 74, were additional wells located north of this point, etc?

**4. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-6, Paragraph 1**

The report notes that there was an abandoned fuel line between Building A138 and 86. Please provide additional information concerning these buildings, including, the function of these structures, (were they a power plant, boiler house,

pump house, etc), potential areas of concern associated with the buildings, such as underground storage tanks, vaults, etc.

**5. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-5, Paragraph 4**

The report notes that it is assumed that groundwater at Structure 74 flows towards the west. Another section of the report notes that five wells were installed in the vicinity of this structure. Was water level measurements taken, and if so was a water contour map generated? Finally, the report must depict the location of underground utilities at this structure, the samples (if any) taken at these utilities and the measures which were taken to determine if contamination spread via these utilities.

**6. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-5, Paragraph 4**

The report notes that it was presumed that structure 74 contained heating oil, but the type of heating oil could not be determined. If fuel lines from Structure 74 connect to a boiler house or powerhouse one should be able to find out what type of oil was used. In regards to the type of heating oils please explain why a chemist could not make this determination from the GC (i.e. was more than one oil present, which complicated the GC, etc).

**7. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-6, Paragraph 1**

Please depict the location of Building 84 on the map.

**8. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-6, Paragraph 1**

The report notes that fuel tank were located behind Build 138. Is this Building A138? If not please depict the location of this Building on a map.

**9. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-6.**

The report notes that there were tanks at A138. It is not clear if these tanks were the listed UST noted in Section 1.3.3.1. If these were different tanks were they ever investigated?

**10. Section 1.2.4 Potential Adjacent Contamination Sources.  
Page 1-6.**

“Recent maps do not depict either of these structures, indicating that they may have been closed and no longer exist.”

The lack of a structure on a Navy map should be interpreted that the structures may have been closed and no longer exist. If the structures were closed the Navy should have some documentation that they underwent closure. To determine whether they currently exist is a simple matter to inspect the site for the presence of these structures. Therefore, the Navy should inspect these sites to see if they are still present (a metal detector may have to be employed for the tanks) and provide information indicating that they have been closed.

**11. Section 3.2.4 Groundwater Samples.  
Page 2-6.**

The report states that the wells were tested for NAPL. Please indicate in what step of the process this test was performed, i.e. before development, after development, before purging, after purging, etc.

**12. Section 3.3.2.1 Groundwater Gradient.  
Page 3.5.**

The report has not stated whether any of the wells at SWOS was affected by tidal action. Please note in the report whether tidal measurements were made on any of the wells, and/or whether there is any information indicating that these wells are affected by the tides.

**13. Section 4.1.1. Contaminant Distribution.  
Page 4.1**

Petroleum contaminated soil was observed during the construction of SWOS. This section should note this. Further, the location and depth of this soil contamination must be depicted on a map.

**14. Section 4.1.1. Contaminant Distribution.  
Page 4.1**

Elevated levels of TPH (1000-2000 ppm) were found in surface and subsurface soils found at the southern end of the site. The report should include an expanded discussion of these findings, i.e. whether the contamination observed at this location is linked to contamination observed at the northern end, whether there is a separate source area, etc.

**15. Section 4.1.1. Contaminant Distribution.**

**Page 4.1**

Elevated levels of TPH were observed at the eastern end of the site in the debris area. The report should note this and indicate whether the contamination observed at this location is contiguous with the contamination observed at the northern end or represents a separate source area.

**16. Section 4.1.2. Subsurface Soils.**

**Page 4.1**

Subsurface soils were primarily collected at either the water table or at the interval between the water table and the ground surface. This approach is acceptable for this limited investigation, which was designed to determine whether contamination is even present. However, it does not allow one to determine the nature and extent of contamination. At the OFFTA site it is known that contamination was found below the water table. Therefore, this section should clearly note that the full vertical, and in some cases, horizontal extent of contamination was not ascertained in this study. .

**17. Section 4.1.1.4 Metals.**

**Page 4.3 Paragraph 2**

Please include a statement in this section, which notes that lead was found at a concentration of 361 ppm in a surface soil sample on the northeastern side of the site.

**18. Section 4.2.1.4 Metals.**

**Page 4.5, Paragraph 3.**

“Most notably lead was found at concentrations above 150 ppm in samples from borings where....”

Please modify the above as follows:

Most notably lead was found at concentrations above 150 ppm (range 150-1400) ppm in samples from borings where...

**19. Section 4.3 Contaminant Distribution Summary Groundwater Gradient.**

**Page 4.8.**

This section states that the surface soil data is meaningless since the soils have been reworked. The first step in the analysis of the data is to determine if any surface soils data indicates that there is a release area. If a release area is apparent the next step is to evaluate the subsurface soil data to see contaminated soil in the subsurface correspond to contaminated soil in the surface. If there is no

connection between the two, the report should note this and then comment on possible reasons for this disconnect, such as reworking of the soil, the source not being on SWOS, etc. The section of the report must be modified to include this approach and analysis. Statements concerning the usefulness of surface soil data cannot be made until the results of this approach have been made.

**20. Section 7.0 Conclusions,  
Page 7.1, Paragraph 1.**

The report stated that the concentrations of arsenic and other metals could be considered background since construction at the site has resulted in mixing of surface and subsurface soil. This is not the case as the concentration of arsenic and other metals exceeds the value in the accepted background study. Further, the Navy has not presented any data in support of the position that the observed concentrations falls within the range of subsurface back ground data (statistically of the two data sets, evaluation of soil logs to determine whether surface soil are really composed of subsurface soils, etc). Therefore, due to that above, it is incorrect to imply that the concentrations of metals observed at the site are reflective of background and these statements must be removed from the report.

**21. Section 7.0 Conclusions,  
Page 7.2, Paragraph 4.**

The section of the report states that the contamination was primarily found at the northern end of the site near OFFTA and should be considered contiguous with OFFTA. Contamination was also found at the southern end of the site. The Navy has not linked the contamination found at this location with the contamination observed in the northern end. As such it represents a separate source area from the northern end, one that, by its distance, is not linked to OFFTA. The report should note this and state that a separate source area was found on SWOS, which requires additional investigation.

**22. Section 7.0 Conclusions  
Page 7.2, Paragraph**

This section of the report notes that lead, above regulatory standards, was found at the eastern end of the site and this contamination is associated with building debris and not petroleum releases from OFFTA. Elevated levels of TPH, above regulatory standards, were also observed in this area. This contamination was also not contiguous with the contamination observed at the northern end of the site. As such, the debris pile represents a separate source area from the contamination found at the northern end of the site and is not linked to OFFTA. The report should note this and state that this area requires additional investigation.

**23. Section 7.0 Conclusions**  
**Page 7.3, Paragraph 1**

This section of the report notes that the proximity of the OFFTA is the likely source of contamination at SWOS. Further, this contamination may have been the result of a single or multiple releases. However, the report has failed to note that hydraulically SWOS is up gradient of OFFTA and that tidal fluctuations does not appear to affect this area to any significant degree. As such, there does not appear to be mechanisms to connect releases observed at OFFTA with contamination observed at SWOS. The report must note this apparent disconnect in this section.

**24. Section 7.0 Conclusions**  
**Page 7.3, Paragraph 1.**

The final conclusion in the report is that the contamination is limited to areas adjacent to OFFTA and therefore the remedial investigation and remedial actions for SWOS should be merged with OFFTA. At least two additional source areas have been found at the SWOS site, which are apparently unrelated to activities at OFFTA. Therefore, it is inappropriate to merge the contamination found at these locations with that at OFFTA and they must be considered separate source areas linked to the SWOS site. In regards to the contamination observed at the northern end of SWOS the Office of Waste Management final position concerning this matter cannot be made until the comments generated in this comment letter have been addressed and a final remedial action has been proposed for each site. The Office of Waste management will then make a determination whether to support combining the northern part of SWOS with OFFTA.