



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

March 24, 2006

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: Evaluation of the Navy's Response to 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 Navy's Response to comments on the Surface Warfare Officers School, Draft Focused Site Inspection, dated March 3, 2006. In the majority of the responses the Navy has indicated that the concerns broached by the comment will be addressed in the draft final version of the report, which will be submitted for review and approval. Accordingly, the evaluations attached below are limited to those responses, which do not appear to have adequately addressed the comment.

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  
Cornelia Mueller, NSN

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**Evaluation of Navy's Response to Comments on  
Draft Focused Site Inspection, Surface Warfare Officers School  
(Comments Dated December 9, 2005)**

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.*

Response:

Details addressing the detection of oily soils during soil excavation activities associated with the construction of the SWOS Applied Instruction Building are presented in Section 1.2.3.3 under the Previous Site Investigations and History portion.

*Evaluation of Response*

*Section 1.2.3.3 is entitled Final Report and Risk Assessment for Worker Exposure to the SWOS Site. The report is a public document and in order to avoid confusion the suggestion was to include this historical information in the paragraphs on page 1-3, which discusses the history of the site and historical evidence of contamination.*

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?*

Response:

In accordance with the scope of the Focused Site Inspection (SI), a detailed document review was conducted to further determine the source of contamination at the SWOS site. A summary of the findings has been presented in Section 1.2.3. For specific information addressing Structure 74 or other potential sources of contamination to the area along Taylor Drive or the SWOS site, including monitoring well locations, soil samples and sample results, please refer to the Coasters Harbor Island UST Remedial Investigation Report (Halliburton NUS, 1995), cited in the Focused SI report. For ease of reference, the storm drain lines will be added to Figures 1-2, 4-1, and 4-2. A further review of available documentation including the Underground Storage Tank Closure Report Tank 10, Structure 74 (EMAC Engineers, Inc., 2005) and Draft Site Investigation Report Structure 74 (LFR Levine Fricke, 2005) will be conducted to identify any evidence of down gradient contaminant migration from Structure 74, which has been closed, remediated and removed.

*Evaluation of Response*

*The focus of the comment was to include relevant information from other reports into this document as the summary of findings was incomplete. It appears that certain requested information will be added. A final determination as to whether the Navy has addressed the comment will be made upon review of the next submission.*

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.*

Response:

Details of building use and potential areas of concern along the abandoned fuel line can be found in the Coasters Harbor Island UST Remedial Investigation Report (Halliburton NUS, 1995), cited in the Focused SI report. Additional information attained from the review of the Underground Storage Tank Closure Report Tank 10, Structure 74 (EMAC Engineers, Inc., 2005) will be incorporated into the Revised Focused SI report. Site relevant information will be clarified in Sections 1.2.3.1 and 1.2.4, specifically.

### *Evaluation of Response*

*The focus of the comment was to include relevant information from other reports into this document, such as building use and areas of concern. Although the response cites previous studies where this information can be obtained it also notes that relevant information will be included. A final determination as to whether the Navy has addressed the comment will be made upon review of the next submission.*

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.*

#### **Response:**

Please refer to the response to RIDEM's Comment 3 and the Coasters Harbor Island UST Remedial Investigation Report (Halliburton NUS, 1995), cited in the Focused SI report, for details. The Underground Storage Tank Closure Report Tank 10, Structure 74 (EMAC Engineers, Inc., 2005) will be reviewed and relevant site information included for reference.

### *Evaluation of Response*

*The focus of the comment was to include relevant information from other reports into this document as the summary of findings was incomplete. It appears that certain requested information will be added. A final determination as to whether the Navy has addressed the comment will be made upon review of the next submission.*

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.*

Response:

Concentrations of TPH were detected above RIDEM I/C Direct Exposure Criteria in samples collected during the SWOS Applied Instruction Building construction. An overview of the analytical results are presented in Section 1.2.3.3 and are detailed in the Final Report and Risk Assessment for Worker Exposure at the SWOS Site, which is cited in the text and will be provided as a separate appendix in the Focused SI Report. Section 4 presents an evaluation of the contaminants found in samples collected in support of the Focused SI. Data from the Final Report and Risk Assessment for Worker Exposure at the SWOS Site will be reviewed and if possible, the location and depth of soil contamination will be incorporated into a current figure.

*Evaluation of Response*

*Navy has addressed a portion of the comment. The request was also to include observations made during the construction of the building. The Office of Waste Management understands that samples may not have been collected in the area of contamination observed during construction. As such, the map would simply note the location and depth of contaminated soil*

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.*

Response:

As depicted on Figure 4-2, elevated levels of TPH were not observed in soil samples collected south of SB07.

*Evaluation of Response*

*Please review the data for this sample.*

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.*

Response:

As stated in the executive summary, "The scope of the Focused SI was twofold: 1) to determine the source of the soil contamination (oily soils) encountered at the north and east portions of the property during the 2003 construction of the SWOS Applied Instruction Building, and 2) to identify any other contaminants that may be present at the site that may pose risk to potential human receptors." The Focused SI was conducted in accordance with this scope.

*Evaluation of Response*

*It appears that both agencies are in agreement with the concept that the Focused SI was limited in nature. The Office of Waste Management simply wanted the Navy to note this limitation in this section of the report.*

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.*

Response:

Detected concentrations of metals were compared to a Background Soil Investigation for OFFTA (TtNUS, 2000). Statements regarding detected concentrations of metals within background concentrations are considered to be correct and will remain. However, the text concerning the likelihood of soils being mixed during construction will be reviewed and revised for clarity.

*Evaluation of Response*

*Please review the data with respect to accepted values.*

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.*

Response:

Contamination observed on the SWOS site is similar in nature to that documented on the OFFTA site. Specifically, petroleum contamination appears to be contiguous and the Navy has proposed that the two sites be linked and the contamination be addressed together. Lead, while not contiguous to OFFTA, was also found at OFFTA, further reinforcing the similarities between the two sites. Therefore, the selected remedial action(s) will be appropriate for both properties. Chemical constituents detected at the southern portion of the SWOS site are not considered to be indicative of chemical releases.

*Evaluation of Response*

*Based upon the information presented to date the Office of Waste Management disagrees with the Navy's position, however, proposed revisions to the report will be reviewed*

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.*

Response:

Please refer to the response to RIDEM's Comment 21.

*Evaluation of Response*

*Based upon the information presented to date the Office of Waste Management disagrees with the Navy's position, however, proposed revisions to the report will be reviewed*

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.*

*Response:*

The hydraulic gradient will be reviewed and the tidal connection determined, if present. However, determination of the hydraulic gradient may not fully provide evidence of a potential source pathway originating (or not) from the OFFTA site. A release at OFFTA, or in the area at Taylor Drive prior to the construction of this roadway, may have traveled overland, inland to the south as well as north to the harbor.

*Evaluation of Response*

*Based upon the response to earlier comments it appears that tidal fluctuations and hydraulic gradient is not responsible for the observed contamination. In regards to potential spills, which traveled upland, it is assumed that Naval photographs will be reviewed and personnel will be canvassed. Also, if there are any electrical man ways or underground chambers in this area an overland flow of oil may have entered them and the Navy may want to inspect them.*

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.*

*Response:*

*It is our opinion that the Focused Site Inspection demonstrates the contaminants found at the SWOS are associated with petroleum releases contiguous with the OFFTA site, and /or with fill and construction debris placed at the site over past years. Addition of fill information to the site figures and description in revised text will better support this conclusion. There is currently enough information to conclude that the activities leading to the contaminant presence at the SWOS property is similar enough to that which occurred at OFFTA in order to consider both properties one site, and to consider the one site as a whole for remedial actions accordingly. RIDEM suggests waiting until a final remedial action has been proposed for each site before determining whether or not to merge the two sites - this is unwarranted.*

*Evaluation of Response*

*Based upon the information presented to date the Office of Waste Management disagrees with the Navy's position, however, proposed revisions to the report will be reviewed*