RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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James Shaffer, Remedial Project Manager
U.S. Department of the Navy
Northern Division
Naval Facilities Engineering Command
10 Industrial Highway
Code 1823-Mail Stop 82
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RE: Draft Source Removal Evaluation Report Old Fire Fighter Training Area, Naval Education and Training Center, Newport, Rhode Island

The Office has received the Draft Source Removal Evaluation Report for the Old Fire Fighter Training Area dated 12 January 1998. 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

Paul Kulpa, Project Manager
Office of Waste Management

cc: Warren S. Angell, DEM DSR
Richard Gottlieb, DEM DSR
Kymberlee Keckler, USEPA
Brad Wheeler, NETC

ofsremwp com

Comments on Draft Source Removal Evaluation Report
Old Firefighter Training Area

1. General Comment

In an effort to reduce field over sight during field activities the DEM requested that the Navy submit copies of field notebooks, logbooks, photographs and video tapes collected as part of this effort. The Navy agreed to the States requests in a letter dated 26 June 1996. Field work at the site was essentially completed in July of 1997. Upon completion the DEM requested copies of the aforementioned field logs, photographs, etc. The Navy, however did not forward the requested material. The DEM continued to reiterate its requests, specifically for the field photographs and video tapes, in order to resolve issues concerning the length and locations of specific test pits. Later on it became apparent that this information would be significant in the review of the Source Removal Evaluation Report for the site. However, despite the repeated request for these documents, the Navy did not submit the photographs and video tapes until five working days prior to the submittal deadline for comments on this site. The State is concerned that there was a seven month delay in a simple submittal of field documents. This length of this delay is not the only concern as the State had reduced field oversight based upon assurances that field documents would be submitted in a timely fashion. Delays of this nature should be avoided in the future and the the State is willing to offer assistance to the Navy in order to avoid future delays in the process. Please be advised that due to the aforementioned late submittals, additional comments may be forwarded at a later date or during the draft final review period.

2. Section 2.2.3.1, Monitoring Well Installation: Page 2-6.

Monitoring Well MW 101 was constructed using 5 feet of screen (3 to 8 feet BGS) based upon the presence of visual contamination (petroleum like sheen) at a maximum depth of 8-10 feet bgs and an initial water depth of approximately 8 ft bgs.

Monitoring wells screen for obvious reasons, are typically installed within the area of contamination. The Work Plan for this site reflects this philosophy as it stipulates that well screen will be placed in the area of contamination. The above states that the well was terminated above the area of contamination. This does not conform to the provisions of the Work Plan. The Navy should indicate why the requirements of the work plan were not followed and why the monitoring well was screened above the zone of contamination.

3. **Section 2.2.3.1, Monitoring Well Installation:**
Page 2-6.

This section of the report discusses the monitoring well installation. The report should indicate at what depths the soil samples were taken.

4. **Section 2.2.3.1, Monitoring Well Installation:**
Page 2-6.

It is common practice to take additional samples form soil borings if contamination is observed at different depths. A review of the well log for MW 102 indicates that relatively low FID readings (5-28 ppm) were observed in this boring except for readings taken at 6 ft and 16 ft, 2700 and 400 ppm respectively. As elevated readings were observed at these depths, both locations should have been sampled. However the Navy did not collect a sample from the lower contamination zone. Justification is requested for not collecting a sample from this zone.

5. **Section 2.2.3.1, Monitoring Well Installation:**
Page 2-6.

A review of the information in boring logs for MW 102 indicated that elevated FID readings were observed at 6 and 16 feet bgs. The report should include a discussion of these two different zones of contamination, including a rationale why elevated levels were observed approximately eight feet apart. In addition, since a sample was not collected form the lower elevation, the Navy should indicate what actions will be taken to ascertain the nature of this contamination.

6. **Section 2.2.3.1, Monitoring Well Installation:**
Page 2-6.

Based upon the information in boring log for MW 101 it appears that one headspace reading was collected. The Work Plan for the site stipulates that continuous split spoons will be taken and undergo headspace analysis. The boring log indicates that this was not done. The Navy should indicate why the field work deviated from the requirements of the Work Plan.

7. **Section 2.2.3.3, Groundwater Sampling;**
Page 2-7.

This section of the report discusses the groundwater monitoring conducted at the site and the lack of a sheen as detected by an oil/water interface probe. A review of the findings of the Phase I report and this report indicates that petroleum like sheens were observed during the construction of the monitoring wells and in the test pits. Therefore, since there was evidence of sheen at the site, the Navy should indicate why other measures, other than an oil water interface probe, were not

employed to ascertain the presence of a sheen. The simplest, and most basic measure, would have been to observe the contents of groundwater sample collected in a bailer.

8. **Section 2.3, Shoreline Investigation;**
Page 2-8.

This section of report discusses the shoreline sampling effort. Based upon information obtained form test pits and monitoring wells installed at the site and discussions held in the field with the Navy's contractor it appears that test pits are warranted on the shoreline. These test pits should be installed as part of RI activities.

9. **Section 2.4, Storm Sewer Outfall Sampling;**
Page 2-9.

Sampling an outfall pipe on the northern shoreline was eliminated as a potential sample location because no visible water was flowing from the pipe at low tide.

The above would seem to imply that lack of water flow from the outfall resulted in this outfall not being tested. Obviously, one would not expect water flow from a storm sewer except after rain events. Therefore the lack of water flow should not prohibit this sampling effort. As this report is a public document the above apparent discrepancy should be explained.

10. **Section 2.4, Storm Sewer Outfall Sampling;**
Page 2-9.

Storm sewer outfall pipes are potential preferred conduits for groundwater flow from either infiltration or preferential flow through disturbed backfill material surrounding the pipe. The report should indicate what actions were taken to investigate and test this potential flow pathway.

11 **Section 3.0 Investigation Findings;**
Page 3-2.

This section of the report indicates that the industrial/commercial exposure was used for the recreational exposure route. The industrial/commercial exposure target is the adult populations, and utilize exposure scenarios for a typical adult worker. It is inappropriate for the recreational scenario which involves children, who are more sensitive to many contaminates then adults and whose exposure routes are different (for example children consume more dirt then adults). Therefore, comparisons in this and other sections of the report should be made to the residential scenario and not the industrial/commercial scenario.

12. **Section 3.2, Groundwater:**
Page 3-8/3-9

The report has previously noted that visibly petroleum contaminated soils and groundwater sheens were observed at the site. However, low levels of SVOCs and TPH were detected in groundwater samples. The report should indicate how high levels of petroleum contamination and/or sheen at or in the water table did not results in detection of analytes in the groundwater.

13. **Section 3.2.1, Volatile Organic Compounds (VOCs);**
Page 3-8.

This section of the report indicates that benzene was detected in groundwater samples. Benzene was not detected in soils samples collected at the site. The report should discuss the lack of detection of a contaminate in the soil yet it is present in the groundwater.

14. **Section 3.3, Shoreline Sediments:**
Page 3-11.

This section of the report discusses the results from the sediment samples taken at the site and compares them to human health risk standards. The five sediment samples taken at the site were not designed to determine risk via sediment exposure and should not be presented as such. Therefore, any comparison of this nature in this or other sections of the report should be removed.

15. **Section 3.3, Shoreline Sediments:**
Page 3-12.

This section of the report discusses the TPH results for sediment samples collected at the site. Please discuss any duplicate sample results associated with this sampling event.

16. **Section 3.5 Test Pit Observations;**
Page 3-15.

However the laboratory reported the sample could not be analyzed for TPH because it contained negligible amounts of oil.

The above statement is confusing as it would seem to imply that an aqueous sample could not be run for TPH as it contained a negligible amount of oil. The amount of oil in a sample would not affect the ability to perform TPH analysis. Therefore the above should be clarified. In addition, RIDEM requests a letter from the laboratory concerning this issue.

17. **Section 3.5, Test Pit Observations;**
Page 3-16.

This section of the report discusses the test pitting efforts with respect to the oil water separator at the site. Please provide the dimensions of the oil/water separators, specifically the distance between the two separators and the length, width and height of each separator.

18. **Section 3.6, Estimated Contaminant Volume;**
Page 3-16.

This section of the report discusses volumes of contaminated soil at the site in terms of cubic feet. Quantities of this nature are normally reported in cubic yards. Please adjust the report accordingly.