



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

February 23, 2007

James Colter  
Remedial Project Manager (Code OPNEEV)  
Facilities Engineering Command, Mid-Atlantic  
Naval Facilities Engineering Command  
9742 Maryland Avenue  
Norfolk, VA 23511-3095

**3675**

RE: Draft Work Plan For Non Time Critical Removal Action, Old Fire Fighter Training Area, Naval Station Newport, Newport, Rhode Island

Dear Mr. Colter,

The Rhode Island Department of Environmental Management, Office of Waste Management has reviewed the, Draft Work Plan For Non Time Critical Removal Action; Old Fire Fighter Training Area dated January 11, 2007. The work plan calls for the removal of surface and subsurface structures, the partial removal of contaminated soil and the installation of a stone revetment for erosion control. Attached are comments generated as a result of this review.

As the Navy is aware, while the Office of Waste Management fully supports the removal of contaminated soil, and surface and subsurface structures at the site, it is this Office's position that the proposed limited scope of the remedial effort in terms of contaminants of concern and remedial endpoints does not meet the State's regulatory requirements, as outlined in Section 8 of the Site Remediation Regulations. Accordingly, in order to achieve compliance with State regulations the Navy needs to expand the remedial effort.

The studies performed to date contain the necessary information to allow the Navy to implement additional low cost remedial actions, which are routinely implemented at other sites across the state. These additional remedial actions may include options such as, removal of additional soils, placing oxidants prior to backfilling, installing leaching galleries (for insitu oxidation or bioremediation), phytoremediation, etc. In addition to remediating onsite contaminants, a number of these measures may also address the adjacent sediments.

Finally, be advised as the proposed limited action fails to meet State regulatory requirements, the Office of Waste Management may take regulatory action against the Navy to ensure compliance with State regulations once this CERCLA process is completed.

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

Sincerely,

Handwritten signature of Paul Kulpa in cursive.

Paul Kulpa  
Office of Waste Management  
cc: Matthew DeStefano, DEM OWM  
Richard Gottlieb, DEM OWM  
Kymberlee Keckler, EPA Region I  
Cornelia Mueller, NSN

**Comments on Draft Work Plan  
for Non Time Critical Removal Action  
for the Old Fire Fighter Training Area**

**1. Section 2-4, Regulatory Agency Personnel Site Visits  
Page 24**

As has been done in other work plans please include a statement concerning regulatory notification of field activities. Typically one-week notification is given prior to the start of activities, when possible 24-hour notification is given for the cancellation of activities. Further, since work schedules are dynamic a weekly schedule of upcoming activities is emailed to the regulators. Finally, the entity responsible for notifying the regulators must be specified in the work plan.

**2. Section 4.0, Regulatory Objectives  
Page 4.0**

Please modify the report to include all of the Site Remediation Regulations, not just Section 8

**3. Section 4.0, Regulatory Objectives  
Page 4.2**

“Rhode Island UST and LUST requirements- Underground tanks and support systems will be removed.”

Please modify the above as follows:

Rhode Island UST and LUST requirements- Underground tanks and support systems will be removed in accordance with these requirements.

**4. Section 5.0, Removal Overview  
Page 5.0**

The proposed clean up criteria for petroleum is conditions, which exceed the UCL. Accordingly, the report should note that free product in the soil and groundwater will also be removed.

**5. Section 5.0, Removal Overview  
Page 5.0**

The proposed clean up criteria for the site will not address concerns associated with petroleum contamination below the UCL or the presence of other contaminants such as lead. Accordingly, at this time the Office of Waste Management does not concur with the proposed clean up standards and additional remediation will be required.

**6. Section 5.0, Removal Overview**  
**Page 5.0**

This section of the report deals with the removal of subsurface structures. The report states that if evidence of petroleum contamination is encountered the structure and any associated structure will be removed. It was the Office of Waste Management understanding that all underground structures are to be removed. Please modify the report to reflect this requirement.

**7. Section 5.0, Removal Overview**  
**Page 5.0**

The report states that if evidence of petroleum contamination is encountered the structure and any associated structure will be removed. If it is the Navy's intent to remove underground objects based upon field observations it will be necessary to inspect the entire underground object. As an illustration if a pipe is encountered, using the above criteria it will be necessary to inspect the length of the pipe for oil contamination. Further, in certain situations, visual observations alone will not be sufficient to ascertain if petroleum contamination is present. As an illustration, soil in a pipe may contain concentrations of TPH above the criteria for the removal action. Therefore, the work plan must stipulate that the entire underground object will be inspected and samples will be collected and analyzed as necessary to confirm the presence of contamination.

**8. Section 5.0, Removal Overview**  
**Page 5.0**

Based upon the information provided in this report the underground structures to be removed in addition to the ones cited, include the four underground storage tanks associated with the above ground oil tanks and Christmas trees, the oil tank north of Building 144 which is connected to the two structures (oil water separators?) on the southern end of the site, the pipes from Building 133 and 132 which connect to the aforementioned oil water separator. Areas which the work plan mentioned but was not clearly identified in the figure include the two oil water separators, and the manifold piping system from the ASTs and Christmas trees, which discharged into the oil water separators.

**9. Section 5.0, Removal Overview**  
**Page 5.0**

A review of historical plans and aerial photographs of the site will assist in the demarcation of potential areas of concern. Please provide historical plans for all of the former structures at the site and aerial photographs available from the engineering office at Naval Station Newport. In addition please indicate what was the function of Buildings 126, 130, 131. and 137.

**10. Section 5.0, Removal Overview**  
**Page 5.0**

The report notes that ten test pits will be dug to ascertain the locations of suspect underground structures. The work plan also calls for the removal of the manhole structure and any associated piping. This structure appears to be part or a remnant of the former concrete pad, which housed the AST and Christmas trees. If a sufficient portion of this remnant is still in place, removal of the associated piping may lead to other underground structures such as the oil water separators or USTs. Therefore the report must specify that prior to removing this remnant, the extent of the remnant will be uncovered. Then soil will be excavated along the perimeter of the remnant to a depth sufficient to locate buried pipes which leads to other structures such as the oil water separators, USTs, etc. These pipes or other structures will be tracked prior to the removal of the remnant. If piping is not present the outline of the remnant can still be used to locate other structures, such as the underground storage tanks, oil water separators, etc. This will necessitate taking measurements from the perimeter of the remnant (both GPS and scaled field measurements from existing structures) prior to its removal. This information will be used along with the historic scaled plans to outline the extent of the concrete pad and possible locations for the underground structures.

**11. Section 5.0, Removal Overview**  
**Page 5.0**

The report notes RIDEM will be consulted to determine the location of test pits. It is likely that removal of the remnant and the associated piping will lead to a number of the USTs, the drainage to the oil water separators and the drainage associated with Building 133 and 132, as well as Buildings 132, 133 and 134. If this is the case, these area, will not have to undergo test pit investigation. At this time areas which require test pitting include: USTs not associated with remnant of the pad and the large circular concrete structure immediately west of the pad, visible in aerial photographs demolition of the site. Additional locations will be provided after the requested material in this comment package is provided.

**12. Section 5.0, Removal Overview**  
**Page 5.0**

The location of the various structures is depicted in numerous scaled engineering drawings and aerial photographs. Unfortunately it is not known whether any of the drawings reflect as built. Therefore, the Navy must determine the location of these structures in the field based upon information from both the scaled drawings and the aerial photographs. The locations will be demarcated using GPS and direct ground field measurements from structures still existing on the site (as an illustration the distance from the remnant of the pad and the former day care building will be measured in the field and compared to historical engineering plans). Finally, a metal detector must be employed to fine-tune the location of objects in the field.

**13. Section 7.4.1, Non Aqueous Phase Liquids**  
**Page 7-4, Paragraph 6.**

“The presence of sheen on standing water is not considered as a measurement of NAPLs. Measure NAPLs is anticipated to be the thickness of liquid ¼ or greater measured by the oil water interface probe Appendix F.”

Sheen is considered NAPLs therefore please remove the above and the procedures outlined in Appendix F

**14. Section 7.4.1, Non Aqueous Phase Liquids**  
**Page 7-5, Paragraph 3.**

“The process will be repeated at the Navy’s discretion if NAPLs continue to accumulate.”

Please add the following to the above

To address this problem additional excavation will have to be performed.

**15. Section 7.7, Backfill**  
**Page 7-6, Paragraph 3.**

The Navy has agreed to backfill with crushed stone as to allow for infiltration galleries, etc. Please modify this section accordingly.

**16. Section 9.2, Confirmatory Sampling**  
**Page 9.1, Paragraph 3**

“A PID reading less then 100 PPM will indicate that “

Typically a 20 ppm criteria is employed therefore please modify the above as follows:

A PID reading less then 20 PPM will indicate that

**17. Section 9.2, Confirmatory Sampling**  
**Page 9.1, Paragraph 3**

Field screening with a PID is typically conducted at horizontal intervals of one every five horizontal feet with each sidewall being field screened. Please include requirement in the report.

**18. Section 9.2, Confirmatory Sampling**  
**Page 9.1, Paragraph 3**

At the Tank Farms and other sites at NETC where petroleum contamination was present field screening with Petro Flag kits or immuno assay were employed. These kits greatly

facilitated the removal process. Therefore, please include the use of TPH field kits in the removal work plan.

**19. Section 9.2, Confirmatory Sampling  
Page 9.1, Paragraph 4**

The work plan proposes collecting confirmatory samples at a rate of one sample per 20 linear feet. Although not stated it is assumed that it was the intent to test every sidewall. Therefore in order to avoid confusion in the fields please modify the work plan to state that each sidewall will undergo confirmatory sampling.

**20. Section 9.2, Confirmatory Sampling  
Page 9.1, Paragraph 4**

“Bottom samples will be collected on a 20 foot grid”

Please modify the above as follows:

Bottom samples will be collected on a 10-foot grid

**21. Section 9.2, Confirmatory Sampling  
Page 9.1, Paragraph 4**

“In addition the standing water in the excavation will be evaluated to ensure that no NAPLs remains.”

The above implies that measures will be taken to ensure the free product is not present in the standing water. Please be advised that free product must also be removed from the soils and sediments. Therefore please revised the report to state that free product in soils, sediments and groundwater will be removed.