



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

3728

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

November 3, 2006

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

RE. Draft Action Memorandum, Soil 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 Action Memorandum, Soil Removal Action for the Old Fire Fighter Training Area, dated September 25, 2006. The memorandum 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 there are disagreements between the agencies concerning the risk assessments performed at the site. These assessments are being used by the Navy in support of both the scope for this interim action and the final overall remedy. 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 Navy take advantage of this opportunity to expand the remedial effort. This expansion 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. Further, expanded remedial actions may avoid issues concerning the risk assessments performed at the site and reduce and/or eliminate the need to further characterize the site. That is, the remedial investigation conducted to date was sufficient to support a complete removal action; it is not adequate for the proposed limited action. Finally, please be advised that these options are commonly used in the private sector as they are low cost, remedial alternatives which allow the site to achieve compliance within an acceptable time frame, while at the same time avoiding the time and expense of a long term monitoring programs and concurrent reporting requirements

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

**Comments on Draft Action Memorandum,
Soil Removal Action for the Old Fire Fighter Training Area**

**1. Soil, Fill and Debris Removal
Page 6.**

The work plan calls for the removal of underground structures. In previous discussions it was agreed that the underground tanks and associated piping, oil water separators, and associated piping, etc. depicted in engineering plans and other historical documents for the site would be investigated and remediated as part of this removal action. Please include provisions in the work plan for the investigation and removal of these tanks, oil water separator, associated piping, etc.

**2. Soil, Fill and Debris Removal
Page 6.**

The work plan does not include the removal of free product in soil (petroleum saturated soils). Please include provisions for the removal of free product in soil.

**3. Soil, Fill and Debris Removal
Page 6.**

The proposed TPH removal limit is thirty thousand ppm. Soil above residential and/or industrial commercial standards must be addressed. The Office of Waste Management strongly recommends that the Navy either remove these soils concurrent with the removal of soils, which exceed the UCL or employ an alternate lower TPH standard, which is followed by additional remedial efforts. The open excavations and the equipment at the site offer the Navy a unique opportunity to greatly reduce the cost and time associated with the remaining TPH contaminated soils. Potential solutions include, mixing of backfill soil with oxidants for insitu oxidation, backfilling with stone and installing low cost vertical, perforated PVC pipe, which then could be used as a leaching galleries for insitu oxidation or oxygen and other supplements for insitu bioremediation. Construction of the above upgradient of the site and/or in alternate locations. Employing phytoremediation to address contamination above and below the water table. A number of these solutions offer an additional advantage in that they may also result in the remediation of adjacent sediments. Further, many of these measures are routinely used by the private sector as they are low cost remedial alternatives. Please be advised that the final remedial approach for the site has not been approved. Conducting an expanded removal action and/or engaging in additional remedial activities at this time may avoid the time and expense of later remedial investigations, remedial actions and/or lengthily monitoring requirements.

4. Soil, Fill and Debris Removal
Page 6.

Elevated levels of metals, such as, lead were found at the site. The work plan has not noted whether these areas will be co excavated with the TPH contaminated soil. Please note if these areas will be co excavated. In addition a map must be included depicting the distribution and concentration of metals left behind based upon the current proposed approach for the site.

5. Stone Revetment
Page 6.

The Navy has proposed replacing the existing revetment at the site with a wider revetment, which will cover the intertidal area. This new revetment would be considerable wider then revetments found elsewhere on Coasters Harbor Island and else where on the base. This change in the revetment may adversely affect the eelgrass bed that abuts the site (changes in the hydrodynamics of the area if a wider revetment is installed). Further, covering the intertribal area with a revetment will destroy the beach environment and change it from a sand, mud, cobble, beach habitat to a rock revetment. Therefore, the DEM does not support the revetment as proposed and any replacement revetment must stay within the footprint of the existing revetment. That is, unless the portions outside of the existing footprint are covered with a minimum of 18 inches of sand, mud and cobble (similar to current conditions) and the overall height, including the 18-inch cover does not exceed the current typography.

6. NAPLs Controls During Excavation.
Page 7.

The work plan notes that NAPLs will be controlled short term during excavation. Please note that, if present, long-term measures must be taken to remove NAPLs from the groundwater. Backfilling with crushed stone and installing a vertical, PVC, perforated, pipe at the end of the excavation is one possible mechanism for free product removal.

7. ARARs
Page 8.

Please make the following modifications to the list of ARARs:

Rhode Island Remediation Regulations (entire regulations, not just Section 8).

Rhode Island Underground Storage Tank Regulations (deals with underground storage tanks and associated support structures),

Rhode Island Leaking Underground Storage Regulations (deals with leaking underground storage tanks and associated support structures),

Rhode Island Above Ground Storage Regulations (deals with above ground storage tanks and their support structures),

Rhode Island Oil Pollution Control Regulations (deals with release of petroleum to waters of the state, including groundwater)

Rhode Island Water Pollution Control Regulations (deals with release to water of the state and any modifications to a storm water discharge).

8. Figure 3

The estimated cost for the removal of 1330 cubic yards of material is 1.3 million dollars (approximately 977 dollars per ton). It is anticipated that much of the material can be disposed at a RCRA Subtitle D landfill (municipal landfill) at \$65 per ton for waste and \$15 per ton as daily cover). Excavation, transport, sampling and engineering cost are not reflective of other removals carried out on the base. Accordingly, it is recommended that the Navy review the costs and allocate any savings to additional remedial actions at the site.

9. Figure 3

In the key and the map please delineate the areas to be excavated.