



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-222-4462

September 2, 2004

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: Work Plan Sediment and Groundwater Monitoring, Site 9, Old Fire Fighting Training Area,
Naval Station Newport, Newport, Rhode Island

Dear Mr. Frye,

The Rhode Island Department of Environmental Management, Office of Waste Management has reviewed the Work Plan Sediment and Groundwater Monitoring, Site 9, Old Fire Fighting Training Area. Attached are comments generated as a result of this review.

The work plan calls for the monitoring of sediments adjacent to the Old Firefighting Training Area to ascertain, if the contaminants are degrading in the sediments, whether the planned removal action to be conducted at the site will result in a reduction in contamination observed in the adjacent sediments, and potential sources of sediment contamination. As the Navy is aware, the Office of Waste Management in previous correspondence and meetings has noted that the Navy has failed in the previous submittals to demonstrate that contaminants adjacent to the site are degrading at an appreciable rate and that source of contamination is unrelated to the Old Fire Fighter Training Area. The proposals presented in this work plan either mirror similar submittals, which were found to be inadequate and/or fail to address the issue.

The Navy's position that the source removal may result in a reduction of contamination observed in the sediment contradicts previous statements made by the Navy. The Navy has noted that groundwater at the site is not a source of contamination for the sediments, that is the groundwater did not contain contaminants, which are found in the sediments. Further, the site is well vegetated thus negating the overland erosion route. In contrast, when the Fire Fighting Training center was in operation there were direct discharges into the sediments from the site's oil water separators and direct overland flow across the site, which at the time was not vegetated.

In consideration of the above, the Office of Waste Management questions both the need and the utility of the proposed monitoring plan. The Navy has already demonstrated that the sediments adjacent to the site represent an unacceptable risk. Removal of the contaminated sediments at the same time as the onshore removal action will be cost effective. Conversely, removal of the contaminated sediments adjacent to the McAllister Point Landfill site after completion of the onshore remedial activities greatly complicated and increased the cost of the offshore dredging.

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Therefore, the Office of Waste Management strongly recommends that the Navy direct its limited funds towards the removal of contaminated sediments concurrent with the onshore action

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

Sincerely,

A handwritten signature in cursive script that reads "Paul Kulpa".

Paul Kulpa
Office of Waste Management

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

**Comments on
Work Plan for Sediment and Groundwater Monitoring,
Site 9, Old Fire Fighting Training Area**

**1. Section 1.1, Scope and Objective,
Page 1-1.**

“In addition, sediment data will also be used to support previous findings that the sediment concentration is not only site related but also a result of urban inputs from onshore storm water sewers and offshore sediment bay concentrations.”

The validity of the inputs from the storm water sewers has been questioned. In addition, the Office of Waste Management has not accepted the reference stations employed at this site. Further the concentration of contaminants at the site is above the accepted reference stations in Jamestown. Since the results of the previous findings have not been accepted the above should be modified as follows:

In addition, sediment data will also be used to ascertain whether there are other sources of contamination to the area such as, storm sewers or general inputs from the bay.

**2. Section 2.2, Site History,
Page 2-6, Second Paragraph**

This section of the report describes the use of the site since firefighting training activities were discontinued. The site was also used as a day care facility. Please modify the report to include this fact.

**3. Section 2.4.5, Forensic Data,
Page 2-13, Whole Section.**

The report states that a forensic analysis, similar to the previous study, will be performed at the site. In previous correspondence and meetings the Office of Waste Management raised a number of questions concern the validity of the original study and the conclusion generated by the report. Accordingly, the report was rejected, and the Office of Waste Management stated that conclusions presented in the report could not be used as a foundation for decisions made at the site. The Navy now proposes to perform a second similar study. Please be advised that the Office of Waste Management position concerning this matter has not changed. Specifically, the Office of Waste Management does not approve the proposal of performing a similar forensic study, nor will it accept any conclusions generated from this study or any positions based upon such a study.

**4. Section 3.2, Sediment Sample Collection,
Page 3-2, Whole Section**

This section of the work plan delineates the proposed sample collection locations. It is known that beach environments are dynamic, in that sediments adjacent to the beach shift

and areas are built up or eroded away. Previously the Navy acknowledged that this typical behavior has been observed in the sediments adjacent to the Old Fire Fighting Training Area. It is also the Navy's position that the PAHs at the site are degrading. Therefore, in order to ascertain whether contaminants in the sediments are being degraded, as opposed to being redistributed, a more intense sampling effort will have to be implemented. The sediment sampling will consist of a near shore element and an offshore element. Near shore sediment samples shall be collected on a vertical line extended outward from the shore every twenty-five feet. The terminus will be the outward extent of the area of concern depicted in the Feasibility Study for the site. This outward vertical profiling will occur at one hundred foot intervals along the shoreline of the site. Adjustment can be made in the sampling effort so that the twelve areas identified in the work plan are sampled. To address hydrographic movement, sediment samples will be collected from the 0-6 inch interval. To address degradation, sediment samples will be collected at all locations at the depth or depths that contamination above PRGs was observed.

In regards to the offshore element, the Ecological Risk Assessment notes that localized depositional areas may exist at the site, which were not identified due to the separation distance in the hydrographic study. Therefore, a hydrographic study needs to be performed in order to identify these depositional areas. Once identified these areas would be sampled at the same horizontal and depth interval specified for the near shore sediments.

**5. Section 3.2, Sediment Sample Collection,
Page 3-2, Whole Section**

The Navy has proposed conducting a long term monitoring program at the site to monitor degradation of contaminants in the sediments and the affects of the source removal. In addition, the Navy has noted that a revetment will be installed at the end of the removal action. It is known that beach environments are dynamic. Further, the installation of a revetment may have unforeseen consequences, such as the beach erosion observed at McAllister Point Landfill. Therefore, in consideration of the above the Navy needs to measure the baseline topographical features at the site. The study area should extend out from the beach into coaster harbor. Once this baseline is established periodical sampling will have to be performed to access the changes in the typography of the site. This information will be used to modify where sediment chemistry samples will be taken.

**6. Section 3.2, Sediment Sample Collection,
Page 3-2, Whole Section**

The Navy has stated that PAHs in the sediments are degrading. In support of this position the work plan must include a section on PAH degradation. Specifically, the work plan must depict the degradation pathway and breakdown products for each PAH. These degradation breakdown products must be added to the SVOCs list for at the site. . In addition, as has been done at other sites where degradation is occurring indicator parameters associated with degradation must be tested for.

**7. Section 3.4, Groundwater Sample Collection,
Page 3-9, Whole Section**

The report notes that the wells will be purged prior to sample collection. In order to determine the appropriate location to place the low flow sampler, the purge water will be screened with a FID during the purging process. That is, the wells will be purged by slowly lowering the purge tubing in set increments. The discharge water will be screened with a FID or PID. The groundwater resample will be collected in the zone, which exhibited the highest reading.

**8. Table 3-2 Field Quality Control Table Summary,
Page 3-6.**

The table notes that sediment samples will be analyzed for SVOCs using method 8270c and VOCs by 8260 b. The report is a public document, therefore the compounds associated with each test method must be included in the report.

**9. Table 3-2 Field Quality Control Table Summary,
Page 3-6.**

The table notes that TPH groundwater samples will be analyzed using 8015A. This method is only applicable to volatile TPH fractions. It is known that a wide range of petroleum products was used at the site, and that the heavier fractions have a higher probability of still being present. Therefore, TPH analysis should include both volatile and extractable fractions. This will require two different test procedures for TPH. The work plan must be modified to include both test procedures.

**10. Table 3-2 Field Quality Control Table Summary,
Page 3-6.**

The table specified TAL analysis for sediment samples collected at the site. Although not listed it is assumed that the TAL includes cadmium, chromium and copper. Please confirm.

**11. Table 3-2 Field Quality Control Table Summary,
Page 3-6.**

It is the Navy's position that the parking lot is a contributor of contaminants in the sediments. Therefore sediment samples should undergo analysis for constituents associated with parking lots such as VOCs (BTEX, etc), MTBE (slowly degraded gasoline additive) and metals (associated with automobile brakes, catalysts, etc)

**12. Table 3-2 Field Quality Control Table Summary,
Page 3-6.**

Samples from the storm drains in the parking lots and site storm drains should be collected to demonstrate that these drains are the source of contamination in the adjacent sediments.

Storm drain samples should be analyzed for metals, TPH, VOCs (including MTBE), SVOCs and metals.

**13. Table 3-2 Field Quality Control Table Summary,
Page 3-6.**

The Navy has stated that PAHs are degrading in the adjacent sediments. In support of this position the sediments must be analyzed for all of the degradation product associated with PAHs, as well as the indicator parameters associated with degradation.

**14. Table 3-3, Analytical Methods, Sample Container, Preservation and Holding Times,
Page 3-7.**

EPA Method 5035 must be applied to all VOC, and TPH volatile range, sediment samples and storm drain samples.