



RHODE ISLAND  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

235 Promenade Street, Providence, RI 02908-5767

TDD 401-831-5508

June 29, 2001

Mr. James Shafer, Remedial Project Manager  
US Department of the Navy, Northern Division  
Code 1823, Mail Stop #82  
10 Industrial Highway  
Lester, PA 19113-2090

RE: Closeout Report, Melville North Landfill Naval Station Newport  
Portsmouth, Rhode Island

Dear Mr. Shafer;

The Rhode Island Department of Environmental Management, Office of Waste Management (OWM) has reviewed the above referenced document. Attached are comments generated as a result of this review

If you have any questions or require additional information please call this Office at (401) 222-2797 ext.7111

Sincerely,

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

Paul Kulpa,  
Project Manager

cc: R Gottlieb, DEM OWM  
M Griffin, NETC

1640

**Comments on  
Close Out Report  
For  
Melville North Landfill at  
Naval Education & Training Center  
Newport, Rhode Island**

**1. General Comment.**

Two previous removal actions were completed on the site. The required Close Out Report was not submitted for these removal actions. Please include as agreed, and required, the Close Out Reports for these actions as part of the Final Close Out Report for the site.

Evaluation of Response

Previously, the Navy requested that they be allowed to submit the Close Out Reports for the two previous remedial actions as part of the Final Close Out Report for the entire site. The State agreed with the Navy's request. Now the Navy has indicated that the submitted Close Out Report will be limited to the most recent removal action and will not address the previous actions. Please be advised that the Navy is required to submit a Close Out Report for the actions performed on the site. The Navy may elect to issue them as separate submittals. These reports must address all of the appropriate comments outlined in this original comment package. The State will issue a letter of compliance upon review and approval of these reports.

**5. Section 1.2, Background  
Paragraph 5, Page 1-1.**

"The landfill reportedly received a variety of wastes from WWII to 1955. These waste included spent acids, various waste oils, solvents, waste paints and possible polychlorinated biphenyls (PCBs). .... operations of various oil spills."

This section of the Report deals with land filling activities at the site. The report notes that the site was used as a landfill from WWII to 1955. As reported by the Navy in previous documents disposal activities continued at the site after 1955. Therefore, please modify the above as follows (Note the following information was obtained from previous reports submitted by the Navy):

The landfill reportedly received a variety of wastes from WWII to 1955. After 1955 the Navy continued to use the site for disposal, however the majority of the waste generated at the Navy base was disposed of at McAllister Point Landfill. Waste disposed of at the site included spent acids, various waste oils, solvents, waste paints and polychlorinated biphenyl's (PCBs). A series of man made lagoons, depressions in the earth into which liquid waste from fifty-five gallon drums or tanks were dumped, was observed in aerial photographs taken at the site from 1951 to 1970. The location and the shape of the lagoons changed over the years, and smoke was observed being emitted from one of the lagoons. Drums of waste were also disposed of at the site and

sludges were also disposed of at the site. Initial inspections performed at the site in 1983 revealed mounds of oil-soaked soil and surface areas that were covered with oil and oil sludge. It was reported that the mounds of oil soaked soil came from the disposal of the oil sludge material generated while cleaning fuel supply tanks at the nearby tank farms, or from cleanup operations of various oil spills. During remedial activities performed at the site additional oil soaked areas were uncovered. In addition, the lagoons, which had been filled in, were found to contain free product (waste which exists as a separate liquid state). In addition numerous fifty five-gallon drums, some of which contained free product, was found throughout the site.

#### Evaluation of Response

The Navy has stated that they have not found any documentation concerning the above including the observation that smoke was reported from one of the lagoons. The Navy has requested that RIDEM provide said documentation.

In the original comment letter the Office of Waste Management noted that this information was obtained from reports previously submitted by the Navy. As an illustration, the observation that smoke appeared to be emitted from one of the lagoons was in the Remedial Investigation Report, Naval Education and Training Center, Newport, Rhode Island, November 1991. This report was produce for the U.S. Navy, specifically Northern Division, Naval Facilities Engineering Command, Philadelphia Pennsylvania. The report was produce by the Navy's remedial contractor, TRC Environmental Consultants, Inc.

The Office of Waste Management is concerned with the position in the response that the Navy was unable to find any documentation concerning the above. This statement was made despite the fact that this iinformation was in reports produced by the Navy, which dealt directly with the site, and the Navy was alerted to the availability of said information. In general, this position brings into questions the Navy's efforts to address the comment. In regards to the specific issues broached in the comment, please modify the report as originally requested.

**9. Section 4.4.1, PCB Hot Spot Removal,  
Page 4-3.**

Please include a table with the confirmatory results for this area and a figure depicting the locations of the confirmatory samples.

#### Evaluation of Response

The Navy has included a table and accompanying figures depicting the location and sample results from the PCB hot spot removal. Based upon the information presented it appears that samples 2 and 3 PE were taken outside of the excavation areas. Please explain. In addition, the included figures are hand drawn and several of the numbers are not legible and /or written over, and the actual boundaries of the removal area are not clear Please resubmit a clearer drawing.

**16. Section 4.4.2, Area 1,  
Page 4-4.**

The report should include a description of the soils excavated from this area. Noting, whether stained soils, free product, odors, asbestos etc was observed. In addition, the report notes that metal debris was found in this area. This metal debris included fifty five-gallon drums, five-gallon containers and small tanks. This should be noted in the report.

Evaluation of Response

Fifty five-gallon drums, five-gallon containers and stained soils were found in area 1. As requested please include this information in this section of the report.

**24. Section 4.4.3, Area 2,  
Page 4-4.**

During the excavations carried out in Area 2 oil saturated soils and oil sludge was found. In addition, free product was observed flowing from the toe of the excavations and petroleum odors were detected. This should be noted in this section of the report. Please modify the report as follows: During the excavations carried out in Area 2 petroleum saturated soils were uncovered as well as petroleum sludge. In addition, at numerous locations, free product containing oil was observed flowing from the toe of the landfill. The free product would form a separate floating layer in the ponded water that collected in the excavation trench.

Please be advised that the State has photographs of the above, which the Navy may wish to include in the Close Out Report.

Evaluation of Response

In response to the above the Navy has noted that a petroleum sheen and oil impacted soil was found at this section of the site. The oil floating on the groundwater on this section of the site was more than a sheen, it was free product. As such the report should note that free product was found in this area. In addition oil saturated soils and oil sludge was found at this section of the site, and these observations must be included in the report.

**26. Section 4.4.3, Area 2,  
Page 4-4.**

In Area 2 oil was observed flowing from the toe of the excavations into areas which previously had tested clean. The Navy employed a variety of measures in order to control this actions, such as oil socks, dikes, channels, etc. This should be noted in the report. Accordingly, the following should be added to this Section of the Report: During the excavation of Area 2 free product, (petroleum floating on the surface of the water) was observed flowing from the areas of active excavation into previously clean areas at the base of the excavation. The Navy employed a variety of measures, such as oil absorbent tubes, dikes, channels and active pumping to control the migration of

free product

Evaluation of Response

Please modify the report as requested noting that measures were taken to control the flow of free product (not sheen)

**27. Section 4.4.3, Area 2,  
Page 4-4.**

As part of the excavation of Area 1 and 2 it became necessary to pump water and oil into holding pits located in the areas to be excavated. This should be noted in the report.

Evaluation of Response

During excavation activities it became necessary to pump water into holding tanks within the areas to be excavated.

Please modified the above as follows to reflect site conditions:

During excavation activities it became necessary to pump oil and water into holding tanks within the areas to be excavated

**31. Section 4.4.3.4, Oil Product in Test Pit,  
Page 4-6, Paragraph 3.**

The report notes that small amount of oil observed on the water was due to the presence of immobile oil in the pore spaces of the aquifer. Please indicate if the soils containing this immobile oil was removed, and if so what was the cleanup criteria (the report states that the analytical results for these soils containing oil was being met).

Evaluation of Response

The report notes that "immobile " oil was present at the site, which contributed to the sheen. However, when this soil was tested it did not exceed the regulatory standard for TPH Please confirm

**32 Section 4.4.2/3/4, Area 1/2/3,  
Page 4-4-4-6.**

The report should note that little to no domestic refuse was found on the site during the removal actions. The material uncovered consisted primarily of contaminated soils, metallic debris, including fifty-gallon drums, construction debris and free product.

Evaluation of Response

Fifty five-gallon drums, and free product were found on the site. Therefore, the report must include these items as requested.

**34 Section 4.4.4.1, Area 3 Excavation,  
Page 4-6.**

The report notes that product sheen was observed after the material was excavated. The report should state whether this sheen was observed before or after the confirmatory samples were collected. If the sheen was observed after the samples were collected the report should include a discussion of these results (i.e., No exceedance of the cleanup criteria was observed in the confirmatory samples taken from this area. However product was observed in the area which tested clean. Or The concentrations of contaminants in the soil samples were above the cleanup criteria and free product was observed in this area. etc.).

**Evaluation of Response**

The report states that two layers on the eastern end were contributing to the sheen, and the excavation was completed on the western end. Please confirm that after the removal action in this area was completed a sheen was observed on the groundwater.

**38. Section 4.7, Confirmatory Sample Activities,  
Page 4-10**

The report references a table with the confirmatory sample results taken at the site. This table should include appropriate field observations for each confirmatory sample location, (that is presence of stained soil, oily soil, olfactory observations, etc.). Field notes for these observations should also be included as an Appendix.

**Evaluation of Response**

The Navy has stated that this information will not be included in the table. This information should be included in the report, therefore, please provide a copy of the field notes as an Appendix.

**39. Section 4.7, Confirmatory Sample Activities.  
Page 4-10.**

The report notes that the soil beneath the soil staging area was not excavated, as it was believed to be clean. During the background investigation conducted for the site the Navy proposed collecting background samples from this area. These samples were not collected when the Navy contractor found evidence of petroleum contamination on the surface. This forced the Navy to abandon this area for the background study. Please provide a map depicting the location of the potentially contaminated area and the preconstruction samples. In addition, please provide any field notes or analytical results associated with these tasks.

**Evaluation of Response**

The Navy has noted that the samples in question were collected off site. Please include in the report a copy of the appropriate section of the field notes dealing with this effort in the report.

**60. Section 8.0, Radioactive Material,  
Page 8-1.**

The report should note what field instruments, if anywhere, used to monitor exposure of workers to the site. This discussion should note the effectiveness of these instruments, their radius of detection, their ability to detect contamination in the air, their ability to detect contamination in the soil (soil detection depth, inches, feet, etc), the number of instruments employed, etc.

Evaluation of Response

The Navy states that an ion chamber was used to ensure that personnel were not overexposed to penetrating radiation. Please state if this instrument was suitable for the type of radiation detected at the site and whether it would record lung exposure.

**61. Section 8.0, Radioactive Material,  
Page 8-1.**

The report states that a load that tripped the radiation detector was not rejected if the load was less than thirty percent of background. The report should provide justification for the thirty- percent figure above background. This justification should include any documentation that this is an accepted value to use. In addition the report should include a description of how the background value was obtained, i.e. were readings obtained off site, etc..

Evaluation of Response

The Navy states that "raising the alarm set point to 30 % above background would reduce spurious alarms while still identifying radioactive sources."

As originally requested please provide justification for the thirty percent figure (was this the value that an empty truck would not trigger?).

**62. Section 8.0, Radioactive Material,  
Page 8-1.**

The report states that loads were sent off site disposal if the soil was not going to be used as landfill cover, were not thirty percent above background and were even distributed throughout the load. The report should include written documentation from each of the disposal locations for this material that these criteria were acceptable and within the regulatory guidelines for their individual disposal facilities.

Evaluation of Response

The Navy has stated that "If the printout indicated that the radiation levels were relatively uniformly distributed throughout the load, this would be indicative of a load of soil that for whatever reason, had elevated activity in it. The suspected contaminants at the Melville North Landfill were discrete sources of radium disk and/or gauges, which would have shown up as a clear peaks on the printout. Large quantities of

contaminated soil were not considered to be a likely contaminate, therefore, a relatively uniform contaminated load was not considered to contain radioactive material.

The Navy has stated that if a uniformly contaminated load was found it was not considered indicative of suspected site contaminants and was therefore not considered to contain radioactive sources. In essence, even though the detector stated the load was uniformly contaminated, the suspected sources were discrete, and therefore the load was not considered contaminated. The site is a landfill which contain a wide variety of waste. Not expecting to find uniform contamination is not sufficient cause to consider the load to be clean. The report should note whether other factors were considered in setting this criteria, such as, uniform contaminated loads were consistently found not to contain radiation, etc). If other factors were considered please discuss them in the report.