



State of Rhode Island and Providence Plantations
Department of **E**nvironmental **M**anagement
Office of Waste Management
235 Promenade Street
Providence, RI 02908

14 May 1997

Mr. Philip Otis, P.E., Remedial Project Manager
US Department of the Navy, Northern Division
Code 18, Mail Stop #82
10 Industrial Highway
Lester, PA 19113-2090

RE: Draft Final Phase III Remedial Investigation
IR Program Site 07, Calf Pasture Point
NCBC Davisville, Rhode Island
Submitted 7 April 1997, Dated March 1997

Dear Mr. Otis;

The Rhode Island Department of Environmental Management (RIDEM) Office of Waste Management has reviewed the above referenced document comments are attached. Please revise this document in accordance with the comments prior to issuing the final document.

If you have any questions or require additional information please call me at (401) 277-3872 ext. 7138.

Sincerely,

Richard Gettlieb, P.E.
Principal Sanitary Engineer

Attachment:

cc: W. Angell, DEM OWM
C. Williams, EPA Region 1
H. Cohen, RIEDC
M. Cohen, ToNK
W. Davis, CSO NCBC

letterl.rwg/richg

Comments for:

**Draft Final Phase III Remedial Investigation
IR Program Site 07, Calf Pasture Point
Naval Construction Battalion Center
Davisville, Rhode Island**

Draft Submitted 19 August 1996
Draft Final Submitted 7 April 1997

**1. Comment 4, Page 2-9 & 10, Section 2.4.1.2, Sample Analysis;
Whole Section.**

Please state for the reader, in the text, what modifications were made to EPA Methods 3810, 8010, and 8020.

Navy Response: These methods were modified as stated in the Work Plan addendum.

Comment: Even though the modifications are stated in the Work Plan addendum for the readers understanding a brief discussion of these modifications to these tests should be provided within this section of the RI since it is unlikely they would refer to the Work Plan addendum.

**2. Comment 5, Page 2-14, Section 2.4.5, Well Development;
Paragraph 2, Sentence 8.**

This sentence states that development of the well continued until the turbidity was less than 100 NTU. 100 NTU is a very turbid water. Please explain why the development did not occur until the turbidity was much lower such as 5 or 1 NTU.

Navy Response: Some wells seemed to reach a point at which further reduction in turbidity did not seem feasible. It was assumed that the low flow sampling method and field filtering would further aid in the reduction of the turbidity in the future collection of a sample for chemical analysis.

Comment: The above explanation needs to be added to the text of the RI. It is not clear, however, how the low flow sampling method would aid in the future collection of samples.

**3. Comment 10, Page 5-13, Section 5.2.2.5, BOD/COD;
Whole Section.**

The Navy notes that for this phase of the investigation BOD/COD was not evaluated. Since the Navy is proposing no further action the evaluation of this parameter would

seem prudent to determine if the contaminants are amenable to degradation.

Navy Response: If natural attenuation is considered, BOD/COD will be considered for inclusion in potential sampling program.

Comment: Since the Navy has proposed a natural attenuation alternative with a monitoring program, BOD/COD must be included in the monitoring program.

4. Comment 11, Page 5-14, Section 5.2.3.2, Site Topography and Atmospheric Mixing; Paragraph.

This paragraph notes that the elevation of the site and adjacent area ranges from MSL to 20 ft. The 55 ft high rock outcrop should also be noted.

Navy Response: The reviewer has changed the wording of this paragraph. Actually the referenced paragraph is correct as stated and is meant to be related to the area where the DANC was released and areas down gradient.

Comment: This paragraph deals with atmospheric mixing (air). The sentence in question reads "*Site topography, and the topography of adjacent areas, can influence atmospheric mixing at the site.*". While the DANC disposal area may be downgradient from the rock outcrop from a groundwater standpoint it is not necessarily downgradient from an air standpoint since shifting winds could cause the outcrop to be upgradient, side gradient, etc., from the disposal area. Therefore, the 55 ft elevation of the rock outcrop which is an adjacent area, should also be noted.

5. Comment 13, Page 5-30, Section 5.3.7.3, Plume Extension Under Allen Harbor - VOC; Paragraph 1.

This paragraph states that the model was used to extend the VOC concentration 1000 feet beyond the shoreline. Please be advised that samples from the harbor will be needed to validate the model. This may be undertaken as part of the groundwater studies to be done for the Allen Harbor Landfill. Therefore, the State does not agree, at this time, that a no further action is prudent for this site.

Navy Response: Sediment samples were collected from Allen Harbor and the Entrance Channel during the Marine Ecological Assessment in the areas adjacent to Site 07 where discharge is expected when a saline water wedge is considered. No definitive connection/pathway from Site 07 was apparent.

Comment: RIDEM still believes that samples from Allen Harbor will be needed to validate the groundwater model. While no apparent connection/pathway of the plume from Site 07 has been shown to be a risk for human and ecological risk at this point in time the potential still exists. With an appropriate monitoring plan and institutional controls the Navy's proposed remedy for this site may be acceptable.

6. Comment 19, Table 6-3, Selection of Chemicals of Concern from List of Detected Analytes in Sediments.

Please be advised that many of the Risk-Based Concentrations noted in this Table are higher than the soil standards in the Site Remediation regulations which are also risk-based. This is particularly true of the metals. The values in this column should be changed to reflect the more conservative Rhode Island standard where it is applicable.

Navy Response: Table 6-3 is revised to address reviewer's comments. Wherever necessary, RIDEM's direct exposure criteria is compared against the maximum concentration detected at the site in onsite media or in selected offsite media (sediment and shellfish in the intertidal zone adjacent to the site).

Comment: Elimination of chemicals from the risk assessment is only warranted if the list of chemicals of potential concern is unmanageable. This is not the case at Calf Pasture Point and the State questions the utility of applying this procedure. Please be advised that in the future, this procedure should only be applied when warranted. Finally, the State is aware that historically Region III numbers were used for screening chemicals in a risk assessment. Currently, other lists are available for this process. Therefore, Region IX numbers should be used or where appropriate, RIDEM numbers may be employed.