



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management
DIVISION OF SITE REMEDIATION
291 Promenade Street
Providence, R.I. 02908-5767

2 August 1995

Robert Krivinskas, Remedial Project Manager
US Department of the Navy
NAVFACENGCOM- Northern Division
Code 1823, Mail Stop #82
10 Industrial Highway
Lester, PA 19113-2090

RE: ADDENDUM TO THE FOCUSED FEASIBILITY STUDY
SITE 09, ALLEN HARBOR LANDFILL
Naval Construction Battalion Center, Davisville Rhode Island

Dear Mr. Krivinskas:

The Rhode Island Department of Environmental Management, Division of Site Remediation (RIDEM), has reviewed the above referenced document and comments are attached. Please note that these comments are preliminary since this focused feasibility study was based solely on the source control operable unit and we are currently proceeding with a whole site remedy. Comments are provided since it is anticipated that the alternatives considered in this addendum to the focused feasibility study will comprise a portion of the whole site remedy.

Between the two focused feasibility studies five alternatives have been considered:

- 1) No Action
- 2) 15' high sheet pile wall
- 3) 3' high sheet pile wall with revetment
- 4) No sheet pile wall with revetment
- 5) No sheet pile wall with revetment and constructed wetland

As noted in RIDEM's comments dated 3 April (Focused Feasibility Study), 17 April (Draft Proposed Plan), and 24 April (Proposed Plan) the State did not find alternatives 2 and 3 to be acceptable as they did not meet State ARARs with respect to shoreline stabilization. Specifically, Rhode Island Rules and Regulations for Solid Waste Management Facilities, Section 3.36 which relates to final cover does not consider steel sheetpile to be an acceptable cover material and

Section 10.10 requires that slopes not exceed 3:1. Coastal Resource Management Council (CRMC) regulation 300.2 which relates filling, removing, or grading of shoreline features was not met due to the vertical slope of the steel sheetpile. CRMC's policy regarding a preference for riprap revetments to vertical steel sheetpile was also not met. In addition, the State has serious concerns regarding the long term permanence of the steel sheetpile and costs associated with the maintenance of said sheetpile as well as public acceptance of these alternatives. Obviously, the no action alternative is not acceptable.

Alternative 4 appears to resolve the concerns of the State with respect to ARARs and the 9 criteria that must be satisfied. Alternative 5 would also seem to meet these criteria, but has concerns regarding the constructability and maintenance of the wetlands and the impact their implementation would have on the surrounding environment.

Please be advised that the Coastal Resource Management Council should be copied on correspondence regarding this site. If you have any questions or require additional information please call me at (401) 277-3872 ext. 7138 or Judith Graham at ext. 7142.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard Gottlieb', written over a circular stamp or seal.

Richard Gottlieb, P.E.
Principal Sanitary Engineer

cc: W. Angell, DEM DSR
J. Graham, DEM DSR
K. Anderson, CRMC
C. Williams, EPA Region 1

**COMMENTS FOR:
ADDENDUM TO DRAFT FOCUSED FEASIBILITY STUDY
SOURCE CONTROL
SITE 09 - ALLEN HARBOR LANDFILL**

- 1. Page 3-7, Section 3.2.2, Alternative Evaluation;
Paragraph 3, Sentence 3.**

Through deed restrictions and the construction of fencing along Sanford Road.....

Please note that for safety reasons the fencing must be placed around the entire perimeter of the landfill and not just along Sanford Road. This applies to any alternative that has gas vents. In addition, please state what the deed restrictions would consist of. The report should be revised to reflect these issues.

- 2. Page 3-11, Section 3.2.2, Alternative Evaluation;
Paragraph 2, Sentence 11.**

Fencing would be constructed along Sanford Road.

Please note that for safety reasons fencing must be placed around the entire perimeter for any alternative that has gas vents. The report should be revised to reflect this.

- 3. Page 3-23, Section 3.3.2, Alternative Evaluation;
Paragraph 2, Sentence 3.**

Through deed restrictions and the provision of fencing along Sanford Road,.....

Please state in the report what the deed restrictions would consist of and that for alternatives with gas vents fencing must be placed around the entire perimeter of the landfill for safety reasons.

- 4. Page 3-24, Section 3.3.2, Alternative Evaluation;
Paragraph 1, Sentence 7.**

However, the presence of revetment materials over the barrier layers of the cap could compromise the integrity of the cap along the Allen Harbor shoreline slopes.

Please explain in detail how the revetment materials over the barrier layers compromises the integrity of the cap beyond normal settling of landfill contents, gas pressures, and general erosion that would normally occur.

**5. Page 3-26, Section 3.3.2, Alternative Evaluation;
Paragraph 1, 5th full sentence.**

Alternative 5 requires the greatest volume of existing waste excavation to cut back the shoreline slope of the landfill and, as such, results in the greatest exposure of workers to waste materials during both excavation and recompaction on the landfill's surface

For Alternative 5 please explain if waste material that is within the watertable would also be excavated in locations where the wetland would be. In addition, please explain what kind of material would be brought in to bring the wetland to final grade and what impacts would be associated with this activity.

**6. Page 3-28, Section 3.3.2, Alternative Evaluation;
Paragraph 1, Sentences 5, 6, and 7.**

Fencing would be constructed along Sanford Road. Deed restrictions would be implemented if control of the property was relinquished by the federal government. Under these deed restrictions, future recreational site use could be restricted to ensure protection of the containment features and limit exposures to vented gases.

As previously noted, for safety reasons, fencing must be placed around the entire perimeter of the landfill for any alternative that has gas vents. Deed restrictions must be placed on the site at the time of implementation of the alternative not at the time the government may transfer the land to a different owner. In addition, it is noted that deed restrictions would prevent future recreational use but makes no mention of other forms of development. It would seem that to protect the integrity of the cap and possible exposures to vented gasses deed restrictions should limit development that would have an impact on these qualities of the remedial effort.

**7. Page 3-30, Section 3.4.1, Overall Protection of Human Health and the Environment;
Paragraph 2, Sentence 4.**

Therefore, Alternative 5 is likely to present the greatest short-term risks to site workers.

Please explain if any analysis was done that quantifies the risks.

**8. Page 3-31, Section 3.4.3, Long-Term Effectiveness and Permanence;
Paragraph 3, Sentence 3.**

The exposed portion of the sheet piling for alternatives 2 and 3 would require periodic maintenance due to its exposure to the elements and could be expected to have a shorter life span, although compliance with the RCRA 30-year post-closure maintenance and monitoring is expected.

In response to RIDEM's comment # 30 for the remedial design of Allen Harbor Landfill the Navy stated on 10 May 1995 that 10 to 15 years of additional useful life

can be added to steel sheet pile in a salt water environment through the application of protective coatings. Please state what type of coatings would be applied and a reference that demonstrates the additional useful life of the steel sheet pile.