RESPONSES TO RIDEM COMMENTS FOR DRAFT DETAILED ANALYSIS OF ALTERNATIVES REPORT SITE 06-SOLVENT DISPOSAL AREA NAVAL CONSTRUCTION BATTALION CENTER DAVISVILLE, RI

GENERAL

These are responses to RIDEM's comments to the document entitled "Draft Detailed Analysis of Alternatives report Sites 6 and 13". RIDEM's comments are contained in their letter dated 13 June 1994.

Comments pertaining to Site 06 are only addressed in this document. Since a removal action is scheduled for Site 13, comments pertaining to this site will be addressed later under a separate cover.

As suggested by EPA, ground water at these sites is designated as a new operable unit. Therefore, comments pertaining to ground water remediation at these sites will be addressed later under a separate cover. However, general information pertaining to ground water including flow direction, depth, and levels of contamination will be included in the DAA responses. Comments pertaining to this general information are addressed in this document.

General Comment

Please provide a list of abbreviations/acronyms at the beginning of the document. Readers of this document, particularly the public, would find it very helpful.

Response: The document will be revised as requested.

SITE 06 COMMENTS

1. **Executive Summary, Background**
   Page ES-4, Paragraph 1.

   The manganese in the ground water may be due to the geologic formation of the area and not to site related conditions. Please provide an explanation for its existence. Also, please provide an explanation of the action or actions required when lead is in exceedance of 15 ppb in drinking water. Please explain how these actions apply or not apply to this site.

Response: Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.

2. **Executive Summary, Background**
Page ES-9, Paragraph 2.

It is stated that manganese is not a site-related contaminate and its presence is noted in upgradient wells as all NCBC Davisville sites. Please state if an attempt has been made to locate the possible source of manganese.

RIDPES standards/RI ambient water quality criteria would apply to catch basins which discharge to surface water bodies.

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*

3. **Executive Summary, Alternative 3 - Containment and Monitoring:**
Page ES-12, Paragraph 2.

"Implementation of this alternative could limit the potential for future commercial/industrial use of the site, based on restrictions which would be required to protect the integrity of the cap."

It should be clearly stated that commercial/industrial use of the site would not be allowed under alternative S-3B (single layer cap), but could occur, if appropriately designed, under alternative S-3A (vegetative cover).

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*

4. **Section 2.3.2, Site Hydrogeology:**
Page 2-3, Paragraph 1.

Figure 2-3 should be changed to Figure 2-5.

Response: *The text will be revised as requested.*

5. **Section 2.3.2, Site Hydrogeology:**
Page 2-3, Paragraph 3.

Since this is a public document please explain how it was determined that the measured vertical gradients indicate that vertical transport would have little impact on contaminant migration at the site. It is suggested that the numbers be put in perspective

for the public, for example, what does $-1.81x10^{-3}$ mean in terms of movement of water in the ground.

Response: *The following text will be added to describe vertical gradients in a more understandable manner. The negative number indicates that the vertical ground water movement is downward.*

6. **Section 4.2.3, Alternative S-2-Limited Action Alternative Description Page 4-5, Paragraph 1.**

If a fence is to be placed around the site please explain why deed restrictions would only restrict the site from future residential use. This would imply that commercial/industrial uses could still take place which would then negate the need for the fence. It would seem that commercial/industrial site uses as well as other site uses injurious to humans should also be restricted.

Response: *As discussed in the response to EPA Specific Comment #22, the limited action alternative was developed to include a detailed evaluation of both fencing and deed restrictions but not necessarily requiring both to be implemented (hence the "and/or" wording). For example, implementation of deed restrictions without fencing will be protective of human health under the proposed future commercial/industrial site use. As noted in Section 5, deed restrictions without fencing is part of the recommended alternative for Site 06. Section 4.2.3 first paragraph, the first sentence would read as follows: "Alternative 5-2 was developed as a limited action in which fencing would be placed around the perimeter of the site and deed restrictions would be implemented".*

7. **Section 4.4.7, Alternative GW-3A - Ground Water Extraction via Trench Option: Page 4-17, Paragraph 1.**

If ground water is extracted at a rate of 2 GPM please explain why the treatment system would be oversized to treat at a rate of 10 GPM.

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*

8. **Section 4.4.9, Alternative GW-3B, Precipitation Inorganic Treatment Option Description:**

Page 4-19,

Given that lead has a limited solubility in water, please state what the removal efficiency for lead would be and whether it would meet removal criteria.

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*

9. ***Section 4.4.13, Alternative GW-3D-Discharge to Surface Water Option Description:***
Page 4-23, Paragraph 1.

This "alternative" is an integral part of either the Precipitation or Ion Exchange and therefore should not be considered as an alternative especially since no other discharge alternatives were considered. The cost for the discharge of the treated water, however, should be factored into the cost analysis for the above two mentioned treatment alternatives. Similar concerns exist for "alternative GW-3A (Ground Water Extraction via Interceptor Trench Option).

Response: Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.

10. ***Section 4.4.14, Discharge to Surface Water Option Evaluation:***
Page 4-24, Implementability.

Please offer further explanation as to what is meant by "Maintenance of the system will be limited."

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*

11. **Table 3-9, Technologies Which Passed Screening Soil/Ground Water, Site 06.**

Table 3-9 indicates that discharge of treated water to a sanitary sewer/POTW passed screening while Table 3-6 indicates that it did not. Please clarify.

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*

12. ***Figure 4-3, Site 06 Solvent disposal Area - Chemical Precipitation Schematic.***

Unless it can be shown that the lead and manganese concentrations from the aqueous phase of the filter press are acceptable the water should be returned to the equalization tank in this process rather than sent to the pH adjustment unit operation with subsequent discharge to the environment.

Response: *Ground water at Sites 6, 13, and 11 has been designated as a separate basewide operable unit. This comment will be addressed as part of the RI/FS for the ground-water operable unit.*