

July 7, 2004

RESPONSES TO EPA'S APRIL 26, 2004 COMMENTS AND JUNE 21, 2004 REBUTTALS  
ON THE FINAL BASEWIDE GROUNDWATER OPERABLE UNIT  
REMEDIAL INVESTIGATION UPDATE/FEASIBILITY STUDY REPORT (MARCH 25, 2004)  
NSB-NLON, GROTON, CONNECTICUT

**Comment 1: p. ES-16, §ES-4.1**

Throughout this section there are no ARARs for sites with only petroleum contamination. Instead, the Navy can discuss State-mandated standards - ARARs are standards that are enforceable under CERCLA. So replace the term "ARARs" throughout this chapter for petroleum contaminated soils.

**Response:**

Agree. The term "ARARs" will be replaced with "Statutory and Regulatory Requirements" in the sections that discuss Site 3 NSA soil.

**Comment 2: p. ES-19, §ES-4.1.5**

If the NCP analysis is going to be retained, explain that the State has determined that using the NCP format for the analysis meets State standards for analysis. Also, state that compliance with cleanup standards is enforceable by the State, not under CERCLA. (See previous comment about not using the term "ARARs.")

**Response:**

Agree with clarification. The Navy, EPA, and CTDEP agreed to maintain the NCP format for Site 3 NSA soil during the September 2003 meeting. The first paragraph of Section ES.4.1.5 will be updated to clarify this issue. A sentence will also be added to this paragraph that indicates that compliance with State-mandated cleanup standards is enforceable by the State, not under CERCLA.

**Comment 3: p. ES-29, ¶1**

In the last sentence, concerning the lack of any location-specific ARARs, was a map of the federal/state coastal zone consulted to determine whether the Sites are not within the coastal zone? (In some states the coastal zone may include the entire town that borders the coastal waterway). Also, if the Navy is saying that its actions are affecting the Thames River (see under the Endangered Species Act), then the work is affecting the coastal zone. Please revise for internal consistency.

**Response:**

The Connecticut Coastal Management Act (Section 22a-94) and the 100-year flood plain map (Plate 4-26) contained in the NSB-NLON Base Master Plan were reviewed to determine whether the sites are within the coastal zone. Based on this information, Sites 3 and 7 are not located within the coastal zone and are not applicable.

The status of the CT Endangered Species Act on Table 4-2 will be changed from "Potentially applicable" to "Not applicable." Action-Specific ARARs would control any discharges to Stream 5 that could eventually migrate downgradient and impact the Thames River.

Reference to the State of Connecticut Inland Wetlands and Watercourses Act (CGS Sections 22a-37 through 45, RCSA Sections 22a-39-1 through 15) was not previously referenced in Sections 4 or 5 of the BGOURI Update/FS. Activities conducted to remediate the soil at the Site 3 NSA would be covered under this Act. This Act will be added to Sections 4 and 5 as appropriate.

**EPA's June 21, 2004 Rebuttal:**

Delete the CT Endangered Species Act listing instead of changing its status to "Not Applicable."

**Response to Rebuttal:**

The rebuttal was discussed with the EPA on June 30, 2004 during a conference call. It was agreed that Section 4.0 tables summarize potential ARARs and that the tables in Sections 5.0 and 6.0 of the report summarize actual alternative-specific ARARs. The tables provided in Sections 5.0 and 6.0 will be carried forward into the appropriate Records of Decision. After this discussion, it was agreed that the CT Endangered Specific Act listing did not need to be deleted from the Table 4-2.

**Comment 4: p. ES-40, ¶7**

In the third sentence, regarding no location-specific ARARs, see previous comment about the federal/state coastal zone standards.

**Response:**

Please refer to the response provided for Comment 3.

**Comment 5: Table 4-1**

CWA AWQCs are "Relevant and appropriate" not "To be considered." Promulgated regulations cannot be TBCs.

**Response:**

Agree. The recommended change will be made.

**Comment 6: Table 4-2**

Was a map of the federal/state coastal zone consulted to determine whether the Sites are within the coastal zone? (In some areas the coastal zone includes the entire town that borders the coastal waterway). Also, if the Navy is saying that its actions are affecting the Thames River (see under the Endangered Species Act), then the work is affecting the coastal zone.

**Response:**

Please refer to the response provided for Comment 3.

**Comment 7: Table 4-3**

RCRA transportation standards are not ARARs.

**Response:**

Agree. References to 40 CFR Parts 261, 262, 263, 264, 265, and 268 and 40 U.S.C 6901 will be removed as Action-Specific ARARs in Section 4.0 and Table 4-3. The phrase "The standards of 40 CFR \_\_\_ are incorporated by reference" will be added as appropriate to the State of Connecticut Action-Specific ARARs.

**EPA's June 21, 2004 Rebuttal:**

EPA's comment indicated RCRA transportation standards are not ARARs. The Navy response agrees. The Navy response indicates 40 C.F.R. parts 261-265 and 268 will be removed from the table. The Navy response states, "The standards of 40 CFR \_\_\_ are incorporated by reference" will be added to the State of Connecticut portion of the table. Will this be 40 C.F.R. Parts 261, 262, 263, 264, 265 and 268?

**Response to Rebuttal:**

The rebuttal was discussed with the EPA on June 30, 2004 during a conference call. It was agreed that only references to 40 CFR Parts 260, 261, 262, and 264 will be included in Table 4-3.

**Comment 8: Chapter 5.0**

There are no ARARs for sites with only petroleum contamination. Instead, the Navy can discuss State-mandated standards. ARARs are standards that are enforceable under CERCLA. Replace the term "ARARs" throughout this chapter for petroleum contaminated soils.

**Response:**

Agree. Please refer to the response provided for Comment 1.

**Comment 9: p. 5-12, §5.2.5**

If the NCP analysis is going to be retained, explain that the State has determined that using the NCP format for the analysis meets State standards for analysis. Also, state that compliance with cleanup standards is enforceable by the State, not under CERCLA. (See previous comment about not using the term "ARARs.")

**Response:**

Agree. Please refer to the response provided for Comment 2.

**Comment 10: p. 5-39, ¶1**

In the last sentence, regarding no location-specific ARARs, see previous comment about the federal/state coastal zone standards.

**Response:**

Please refer to the response provided for Comment 3.

**Comment 11: Tables 5-5 to 5-8**

In title change "ARARs and TBCs" to "Standards."

**Response:**

Agree. "ARARs and TBCs" will be changed to "Statutory and Regulatory Requirements."

In addition, references to 40 CFR Parts 261, 262, 263, 264, 265, and 268 and 40 U.S.C 6901 will be removed as Action-Specific Standards in Table 5-8. The phrase "The standards of 40 CFR \_\_\_ are incorporated by reference" will be added as appropriate to the State of Connecticut Action-Specific Standards in Table 5-8.

A new Table 5-9 (Location-Specific Standards) will be added that includes reference to the State of Connecticut Inland Wetlands and Watercourses Act (CGS Sections 22a-37 through 45, RCSA Sections 22a-39-1 through 15). Activities conducted to remediate the soil at the Site 3 NSA would be covered under this Act.

**Comment 12: Tables 5-9 to 5-11**

If federal/state coastal zone is present, add Location-specific Tables.

**Response:**

Please refer to the response provided for Comment 3.

The numbers of Tables 5-9 to 5-11 will be changed to Tables 5-10 to 5-12.

**Comment 13: p. 6-21, ¶3**

In the last sentence, there may be location-specific ARARs if in the coastal zone or if work might effect endangered species in the Thames River (see previous discussion). There are action specific ARARs for monitoring (see pages 5-38 to 39 - ARARs for GW2). Also, if the institutional controls

include standards for construction worker, then those standards are action-specific ARARs. The standard for the permeable cover is also action-specific.

**Response:**

Please refer to the response provided for Comment 3.

Disagree. There is no monitoring associated with Alternative S-2; therefore, action-specific ARARs for monitoring are not applicable.

Disagree. There are no action-specific ARARs for construction workers or a permeable cover. The remedy does not involve excavation and therefore standards for construction workers would not apply. Also, the permeable cover is natural material and does not require standards as specified by an ARAR. In the event that the Navy elects to conduct subsurface activities in this area, the applicable Federal and state standards would be identified for the additional activities to be taken.

**EPA's June 21, 2004 Rebuttal:**

The Navy response appears to indicate that groundwater monitoring is covered under Alternative GW-2 and is not part of Alternative S-2. The Navy response states "there is no monitoring associated with Alternative S-2." This statement is contrary to page 6-20 of the FS which states, "periodic monitoring [would be] conducted on an as-needed basis to document degradation and residual contamination." Soil monitoring activities would appear to be part of Alternative S-2. Page 6-20 also states construction workers will wear appropriate PPE if subsurface activities are conducted. The Navy response states, "In the event that the Navy elects to conduct subsurface activities in this area, the applicable Federal and state standards would be identified for the additional activities to be taken." It is not clear from the Navy response whether the compliance with ARAR and TBC text on page 6-21 will be revised to be more consistent with text on page 6-20.

If waste is left in place it needs to be monitored as required under both federal RCRA and State remediation standards. Also, any cap (whether natural or man-made) needs to meet the State remediation regulation standards.

**Response to Rebuttal:**

The rebuttal was discussed with the EPA on June 30, 2004 during a conference call. It was explained that Alternative S-2 for Site 7 soil includes periodic testing of the soil during construction activities for disposal purposes only. The groundwater monitoring component for the contaminated soil at Site 7 was included in Alternative GW-2. The remaining issues raised by the EPA in their rebuttal were not able to be resolved during the conference call. It was agreed that the Navy would complete further review of the alternatives and ARARs and make the appropriate revisions to the FS.

The text for Alternative S-2 was changed to clarify the soil testing and groundwater monitoring requirements.

The following information provides the rationale for the different approaches taken to develop the S-2 Alternatives for Site 7 and Site 3 – New Source Area soil. For Site 7 soil, groundwater monitoring for Alternative S-2 was included in Alternative GW-2 to keep soil

and groundwater issues separate and simplify the costing of the alternatives. The alternatives were subsequently combined into Site-Wide Alternative 2 in Section 6.0 and further evaluated jointly to provide a complete strategy for addressing Site 7 soil and groundwater. In contrast, the S2 Alternative for Site 3 – New Source Area soil in Section 5.0 of the FS included groundwater monitoring (free product and ETPH). This approach was taken because there was a single contaminant of concern (petroleum product) and there was no other significant groundwater contamination associated with Site 3 – New Source Area. Although different approaches were used to incorporate monitoring into the alternatives, both approaches would meet the monitoring requirements of the federal RCRA and State remediation standards for sites where waste is left in place. Therefore, no changes are required to the monitoring information provided for each alternative.

Further review of the Connecticut RSRs was completed to determine if Alternative S-2 for Site 7 soil (Section 6.0) would be compliant with the capping and other general requirements of the ARAR. It was determined by the review that the alternative would not be completely compliant with the ARAR. In particular, some of the contaminated soil that would be left in place under the alternative would not meet the State's definition of "inaccessible soil" [i.e., (a) more than 4 feet below the ground surface, (b) more than 2 feet below a paved surface comprised of a minimum of 3 inches of bituminous concrete or concrete, or (c) beneath an existing building or another existing permanent structure approved by the Commissioner]. Because the soil could not be designated as "inaccessible soil," the alternative would not comply with the Connecticut Direct Exposure Criteria. In addition, soil with contaminant concentrations in excess of the Connecticut Pollutant Mobility Criteria would remain in place under the alternative. Based on a discussion with the State of Connecticut (Mr. Mark Lewis, July 1, 2004), actual groundwater data and groundwater monitoring are not sufficient to show compliance with the criteria. Rather, site-specific dilution factors would need to be calculated and applied to show compliance with the criteria. Changes were made to the appropriate text and tables of Section 6.0 and the text of the Executive Summary to indicate that Alternative S-2 for Site 7 soil does not completely comply with the Connecticut RSRs.

A similar evaluation of ARARs was also completed for Alternative S-2 for Site 3 – New Source Area soil (Section 5.0). The results were similar to those discussed above and showed that the alternative would not be completely compliant with the ARAR (i.e., the cover requirements for Direct Exposure Criteria and the Pollutant Mobility Criteria). Appropriate changes were made to the text and tables of Section 5.0 and the text of the Executive Summary to indicate that Alternative S-2 for Site 3 – New Source Area soil does not completely comply with the Connecticut RSRs.

**Comment 14: p. 6-22, ¶6**

In the second sentence, there may be location-specific ARARs if in the coastal zone or if work might affect endangered species in the Thames River (see previous discussion).

**Response:**

Please refer to the response provided for Comment 3.

**Comment 15: p. 6-38, ¶1**

In the last sentence, there may be location-specific ARARs if in the coastal zone or if work might affect endangered species in the Thames River (see previous discussion).

**Response:**

Please refer to the response provided for Comment 3.

**Comment 16: p. 6-40, ¶3**

In the last sentence, there may be location-specific ARARs if in the coastal zone or if work might affect endangered species in the Thames River (see previous discussion).

**Response:**

Please refer to the response provided for Comment 3.

**Comment 17: p. 6-45, ¶3**

In the third sentence, there may be location-specific ARARs if in the coastal zone or if work might affect endangered species in the Thames River (see previous discussion).

**Response:**

Please refer to the response provided for Comment 3.

**Comment 18: Tables 6-6 and 6-10**

Add Location-specific tables if coastal zone and/or state endangered species are applicable.

**Response:**

Please refer to the response provided for Comment 3.

**Comment 19: Table 6-13**

Section 402 of the Clean Water Act applies if the treated water were discharged into a waterbody, so change the Evaluation/Action to be Take text accordingly. Water going to a POTW is covered under Section 403.

**Response:**

Agree. The reference to Section 402 will be removed from Table 6-13.