



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
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December 16, 2003

Mark Evans, Remedial Project Manager
U.S. Department of the Navy
Naval Facilities Engineering Command
Northern Division
10 Industrial Highway
Code 1823, Mail Stop 82
Lester, PA 19113-2090

Re: Basewide Groundwater Operable Unit Remedial Investigation
Update/Feasibility Study Report for the Naval Submarine Base - New London
Superfund Site

Dear Mr. Evans:

EPA reviewed the *Basewide Groundwater Operable Unit Remedial Investigation Update/Feasibility Study Report* dated October 2003 for the Naval Submarine Base New London, in Groton, Connecticut. Our review checked for revision of the draft document in accordance with the Navy response to comments and discussion at the September 9, 2003 meeting plus adherence to the National Contingency Plan (NCP), consistency with EPA guidance and generally accepted practice for preparation and content for FS documents. Overall, the majority of EPA's earlier comments have been acceptably resolved with appropriate revision to the report. A few relatively minor issues remain that may warrant additional revision of the document. Detailed comments are provided in Attachment A.

Since no federal risk has been identified either for the TPH issues at Site 3, nor for soils at any of the other sites, no federal NCP analysis is applicable. The remediation of these media should be analyzed based on State standards only.

Please search of the entire document and tables and remove all mention of "natural attenuation" and "attenuation" since no analysis of natural attenuation as a remedial action under EPA guidance has been conducted. Depending on the context, the term can be replaced with terms such as "natural biological, chemical, and physical processes" and "expected biological, chemical, and physical degradation."

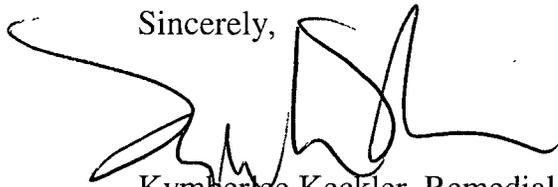
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I look forward to working with you and the Connecticut Department of Environmental Protection to protect the groundwater resources of the base. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kimberlee Keckler', written over a horizontal line.

Kimberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Mark Lewis, CTDEP, Hartford, CT
Melissa Griffin, NSBNL, Groton, CT
David Peterson, USEPA, Boston, MA
Bart Hoskins, USEPA, Boston, MA
Chau Vu, USEPA, Boston, MA
Jennifer Stump, Gannett Fleming, Harrisburg, PA

ATTACHMENT A

<u>Page</u>	<u>Comment</u>
p. ES-16, §ES.4.1	Remove the reference to ARARS and To Be Considered (TBC), since these are CERCLA requirements. Since no CERCLA action is required for the Site 3 soil remedy the Navy should refer to applicable CT Remediation Standards.
p. ES-18, §ES.4.1.4.1	Since there is no CERCLA action, five year reviews are not required under federal standards. The site is already protective of human health and the environment under federal standards, because no risks have been identified. The Navy should cite the standard required under State standards.
p. ES-19, §ES.4.1.5	Since there is no CERCLA action, no analysis of the alternatives under the nine criteria of the NCP is applicable (there is no federal risk, so no protectiveness finding is needed, there are no ARARS, <i>etc.</i>). The applicable analysis of the alternatives under State standards should be used.
p. ES-24, §ES.4.1.6	The Comparative Analysis section should be based on State standards, since the federal NCP is not applicable.
p. ES-25, §ES.4.2.4	Please discuss why no treatment alternative was retained in the alternatives analysis.
p. ES-26, §ES.4.2.4.2	This alternative cannot be called a natural attenuation remedy unless EPA standards for implementing a natural attenuation remedy are analyzed and discussed in the document.

Insert a new third sentence: "The NSB-NLON Site Use Restrictions would be the primary mechanism for documenting and controlling activities at the site. In the event of property transfer and with confirmation that contaminated groundwater remain at the site, a deed notification would be used to prohibit the use of groundwater. If as a result of natural degradation, residual contamination, as determined by a comparison of new site data with PRGs, does not remain at the site, a deed notification would not be required."

(The last sentence of the section is not accurate since the restriction on using the groundwater is a land use restriction. It is more accurate to

state that either future commercial or residential land use would be permitted as long as institutional controls are maintained.

p. ES-26,
§ES.4.2.5.1, ¶1

In the second sentence change “natural attenuation” to “natural, biological, chemical, and physical processes.”

p. ES-27, ¶3

Replace the first two sentences with: “The No-Action Alternative does not comply with chemical-specific ARARS, since it does not prevent use of the contaminated groundwater in violation of applicable State Class GB standards.

p. ES-28, §ES.4.2.5.2 This alternative cannot be called a natural attenuation remedy unless EPA standards for implementing a natural attenuation remedy are analyzed and discussed in the document.

First paragraph, second sentence of the section change “natural attenuation” to “natural biological, chemical, and physical processes.”

Second paragraph, first sentence of the section change “natural attenuation” to “expected biological, chemical, and physical degradation.”

In the fourth paragraph, replace the last four sentences with: “Currently contaminants in the groundwater meet the State Class GB groundwater standards, but exceed State Class A standards. Institution controls will prevent usage in violation of applicable State Class GB groundwater standards. In the future, it is expected that biological, chemical, and physical processes will improve groundwater quality so that Class A standards may be attained. Action-specific ARARS address the handling of contaminated groundwater during well installation and monitoring. No location-specific ARARS are applicable to this alternative.”

In the last sentence of the fifth paragraph, change “of contaminated groundwater as a potable water supply” to “and exposure to contaminated groundwater” [restrictions are not limited to potable use of the groundwater].

p. ES-29, ¶2

In the first sentence change “attenuation” to “degradation.”

p. ES-29, ¶4

Change the sentence to: “Monitoring activities will not pose any short-term risks to the community, workers, or environment.”

- p. ES-29, ¶6 Replace “Because no remedial action is occurring, this alternative would” with “Monitoring activities and implementing institutional controls will.”
- p. ES-29, ¶7 What will monitoring costs be beyond year 4? If a risk still exists that requires 5-year reviews, then monitoring needs to be continued for the entire period of the risk.
- p. ES-29, §ES.4.2.6 Add a new third sentence: “GW1 is not compliant with ARARS since it does not include institutional controls that would prevent violations of State Class GB groundwater standards.”
- p. ES-30, Table Remove in the second alternative title: “Natural Attenuation with” and calculate monitoring costs for the entire period that a groundwater risk will be present at the site.
- p. ES-30, §ES.5 Insert a new fourth sentence (based on the findings presented in §ES-3.2.4): “Risks based on federal standards were only identified for site groundwater, but additional risks under State standards were identified for migration from soil to groundwater and groundwater migration to surface water.”
- p. ES-30, §ES.5.1 Change the sentence to: “PRGs were selected for Site 7 soil based on state standards for risk and regulatory requirements. PRGs were selected for Site 7 groundwater based on federal risk assessment, ARARS, and TBCs.”
- p. ES-34, §ES.5.4 Since there is no CERCLA action for soil because no federal risk was identified, no analysis of the alternatives under the nine criteria of the NCP is applicable (there is no federal risk, so no protectiveness finding is needed, there are no ARARS, *etc.*). The applicable analysis of the alternatives under State standards should be used.
- p. ES-34, §ES.5.4.1 First paragraph, since there is no CERCLA action, five year reviews are not required under federal standards. The site is already protective of human health and the environment under federal standards, because no risks have been identified. The Navy should cite the State standard requirements.
- p. ES-35, §ES.5.4.2 In the first paragraph, at the end of the third sentence change: “it could potentially be used in the future as a potable water supply” to “the alternative does not include institutional controls that would prevent

violations of State Class GB groundwater standards from improper use or exposure to the contaminated groundwater.”

In the second paragraph remove “Natural Attenuation with” in Title (see previous comments under § ES.4.2.4.2). Also, discuss monitoring in the paragraph.

- p. ES-36, §ES.5.5 In analyzing the Site-Wide Alternative the soil component only needs to be addressed under State standards (federal NCP criteria are not applicable), while the groundwater component does have to be analyzed under the NCP criteria.

In the Table, in the title to Alternative GW2 remove “Natural Attenuation with.”

In the second paragraph, no 5-year review for soil is required.

In the third paragraph in the title to Alternative GW2, remove “Natural Attenuation with.”

- p. ES-37, ¶3 In the second sentence, change “natural attenuation” to “natural degradation.”

- p. ES-37, ¶5 Monitoring every five years after the first five years is not adequate. Please revise the groundwater sampling plan.

- p. ES-37, ¶6 Clarify that the five year reviews will be only for groundwater.

- p. ES-38, §ES.5.6 The analysis under the NCP should be for the groundwater component only (not applicable to soil because no federal risk). The soil alternatives need to be evaluated under State standards only.

In the second paragraph change the first sentence [pertaining to groundwater only] to: “Alternative 3 is the most protective alternative since contamination will be removed from the site. Alternative 2 will be less protective since it relies on institutional controls to prevent use and exposure to contaminated groundwater. Alternative 1 is the least protective because it contains no controls on use or exposure to contaminated groundwater.”

- p. ES-39, ¶3 In the second sentence, change “prevent groundwater from naturally attenuating” to “preventing contaminated groundwater from degrading.”
- p. ES-39, ¶5 Remove “Natural Attenuation with.”
- p. ES-40, ¶¶1&2 There are no ARARS for soil. Soil is to be addressed under State standards only.
- p. ES-42, Table Remove “Natural Attenuation with” from the title of Alternative 2.
- p. 4-1, §4.0 Since there are no federal risks from soils, the only ARARS/TBCs pertain to groundwater. Remove all mention of soil ARARS throughout this section. As a separate discussion outside of this section there should be a description of how soil and TPH will be addressed under State standards. The State regulations do not use the term “ARARS.”
- p. 4-1, last bullet All CWA AWQCs are promulgated.
- p. 4-3, ¶1 There is no need to discuss CWA AWQCs for surface water because no federal risk to groundwater was identified.
- p. 4-3, ¶2 The SDWA is a chemical-specific ARAR for the extraction and off-site discharge alternative and an action-specific ARAR for the monitoring and institutional control alternative (since there is no treatment component).
- p. 4-4, ¶3 The CT WQs are action-specific ARARs since they pertain to monitoring and institutional controls. They would only be chemical-specific ARARs if there was a treatment remedy that was using them as a cleanup level.
- p. 4-7, ¶3 The discussion of RCRA Subtitle C should not discuss soils but should instead discuss any potential standards that would apply to installing wells, monitoring and other contact with potentially contaminated groundwater. Standards that apply to the extraction and off-site discharge of contaminated groundwater also should be cited.
- As a specific matter transportation requirements, land disposal restrictions, and corrective action standards are not ARARs.

Since CT is a delegated RCRA state, at many sites only the general RCRA Subtitle C citation is used and the specific requirements are cited under the delegated state hazardous waste regulations (*see* page 4-9).

Tables 4-1, 4-2,
& 4-3

All references to soils should be removed (*e.g.*, under the CT remediation regulations) because there is no federal soil risk, there are no soil ARARs. There is no need to cite general ARARs that have no relevance to the actual site (the tables are not meant to describe all ARARs that pertain to the entire base - only those that pertain to the specific OU). Specifically, ARARs that pertain to the Thames River, which is not within or adjacent to the OU should be removed, including citations for the protection of endangered fish and interference with navigation.

Table 4-1

Move CWA (AWQC) and CT Water Quality Standards to the action-specific ARARs table, pertaining to monitoring and institutional controls.

Table 4-3

Action-specific ARARs that pertain to well installation and monitoring (particularly handling potentially contaminated groundwater) should be discussed in the "Evaluation/Action to be Taken" sections. In addition, standards that will be used for monitoring and determining whether institution controls are still warranted should be also discussed (MCLs, AWQCs, CT groundwater remediation standards).

Table 4-3, p.1

Under the CWA Section 402 and 403 "Evaluation/Action to be Taken" sewer relocations are mentioned. These should be removed unless they pertain to some remedial activity at the OU.

p. 5-1, §5.1

Change "Based on the ARARs..." to "Based on the ARARs (for groundwater only)..."

p. 5-6, §5.2.4

The screening should be based on applicable State standards not from federal standards under the NCP or CERCLA (Does the State require an evaluation of a No Action option?).

p. 5-7, §5.2.4.2

If a No Action Evaluation is retained remove the last sentence since no 5-year review is required under CERCLA.

p. 5-12, §5.2.5

Since there is no federal risk identified from soils the analysis and assembly of soil alternatives should be based on applicable State

- criteria not from federal standards under the NCP or CERCLA. The nine criteria under the NCP are not applicable (as an example, there are no ARARs).
- p. 5-16, §5.2.5.2 If a No Action Alternative is retained remove the reference to 5-year reviews, these are only required under CERCLA.
- p. 5-17, ¶3 In the first sentence replace “Natural attenuation” with “Natural degradation.” In the second sentence, replace “attenuation” with “degradation.”
- p. 5-17, §5.2.5.3 The soil alternatives should be evaluated under State criteria, not the NCP seven criteria.
- p. 5-18, ¶4 There are no ARARs for soil, since no CERCLA action.
- p. 5-19, ¶3 There are no five-year review costs.
- p. 5-19, ¶7 In the first sentence replace “Natural attenuation” with “Natural degradation.” Remove the last sentence since no five-year review is required.
- p. 5-20, ¶3 Replace “attenuating” with “degrading.”
- p. 5-20, ¶4 There are no ARARs for soil, since no CERCLA action.
- p. 5-21, ¶6 There are no five-year review costs.
- p. 5-22, ¶2 There are no ARARs for soil, since no CERCLA action.
- p. 5-23, §5.2.5.4 The soil alternatives should be evaluated under State criteria, not the NCP seven criteria.
- p. 5-24, ¶6 There are no ARARs for soil, since no CERCLA action.
- p. 5-25, ¶2 In the first sentence replace “natural attenuation” with “natural degradation.”
- p. 5-26, ¶3 There are no five-year review costs (*see also* Table).
- p. 5-31, ¶2 In the third sentence change “attenuate” to “degrade.”

- p. 5-31, ¶4 Also add that there would be some cost for five-year reviews.
- p. 5-31, ¶8 No permits are required if the extraction is part of the CERCLA remedy.
- p. 5-33, ¶4 Remove second sentence since no analysis of natural attenuation has been conducted.
- p. 5-34, §5.3.5.1 In the title of the second alternative remove “Natural Attenuation with.”
In the paragraph, describe monitoring.
- p. 5-35, ¶1 Add a new sentence: “In the event of property transfer and with confirmation that contaminated groundwater remains at the site, a deed notification would be used to prohibit the use of groundwater.”
- p. 5-35, ¶4 In the second sentence change “natural attenuation” to “natural degradation.”
- p. 5-35, ¶7 Replace the second and third sentences with: “The No-Action Alternative does not comply with chemical-specific ARARS, since it does not prevent use of the contaminated groundwater in violation of applicable State Class GB standards.
- p. 5-36, ¶9 Remove “Natural Attenuation with” from the title and remove “natural attenuation of site contaminants with” from the first sentence (there has been no analysis under EPA guidelines for calling this a natural attenuation remedy).

At the end of the third sentence add: “in the event of a property transfer and with confirmation that contaminated groundwater remain at the site, a deed notification would be used to prohibit the use of groundwater.”
- p. 5-37, ¶2 In the first sentence, change “attenuation” to “degradation.”
- p. 5-37, ¶5 In the first sentence, change “attenuation” to “degradation.”
- p. 5-37, ¶8 In the second sentence, change “attenuation” to “degradation.”
- p. 5-38, ¶2 In the first sentence, change “attenuation” to “degradation.”

- p. 5-38, ¶4 Add at the end of the second sentence, “that were used to identify groundwater risks.”
- Replace the last three sentences with: “Action-specific ARARs address state water quality standards for monitoring contaminant levels and federal and State hazardous waste standards for the handling of contaminated groundwater during well installation and monitoring. No location-specific ARARs are applicable to this alternative.”
- p. 5-38, ¶7 In the first sentence, change “attenuation” to “degradation.”
- p. 5-39, ¶3 Change the sentence to: “Monitoring activities will not pose any short-term risks to the community, workers, or environment.”
- p. 5-39, ¶5 Replace “Because no remedial action is occurring, this alternative would” with “Monitoring activities and implementing institutional controls will.”
- p. 5-40, ¶2 Change the name of Alternative GW2 to “Monitoring and Institutional Controls.”
- p. 5-40, ¶3 Change the last three sentences of the paragraph to: “Alternative GW1 does not comply with chemical-specific ARARS, since it doesn’t prevent use of the contaminated groundwater in violation of applicable State Class GB standards. Alternative GW2 complies with all chemical-specific ARARs. There are no action-specific ARARs for Alternative GW1, but Alternative GW does comply with action-specific ARARs that address using federal MCLs and State water quality standards for monitoring contaminant levels and federal and State hazardous waste standards for the handling of contaminated groundwater during well installation and monitoring. No location-specific ARARs are applicable to either Alternatives GW1 or GW2.”
- p. 5-40, ¶6 Replace the second sentence with: “Ultimately, it is expected that improvement of groundwater would occur, but it would depend on relatively slow natural chemical, biological, and physical processes.”
- p. 5-41, ¶3 Change the text to: “Alternative GW1 would not present any short term risks to the community, workers, or environment since no active remedial action would take place. Alternative GW2 remedial actions, including well installation and monitoring, along with implementation of institutional controls, would pose no short term risks as long as

proper worker safety precautions were made when handling potentially contaminated groundwater during monitoring.”

p. 5-41, ¶4

In the third sentence, change “attenuation” to “degradation.”

p. 5-42, Table

Remove “Natural Attenuation with” from the title of Alternative GW2.

Table 5-2

EPA agrees that groundwater under Site 3 should be considered along with Site 7 groundwater. Given this approach, it is confusing to have two separate groundwater PRG tables. The revised FS includes Table 5-2 for sites 3 and 7 plus Table 6-2 for site 7 with TCE and hexachlorobenzene in common between the tables.

In response to an earlier EPA comment on this, Navy explained that chemicals such as trichloroethene, vinyl chloride, and hexachlorobenzene found at site 7 are of regional concern and will be addressed with the Site 3 groundwater. To reduce ambiguity, EPA recommends creating a comprehensive list of PRGs for COCs in the combined site 3 and 7 groundwater. I recognize that monitoring for the entire COC list throughout the sites 3 and 7 groundwater area may not be necessary. This concern could be addressed through design of a monitoring program with well specific analyte lists.

Tables 5-5, 5-6, 5-7,
& 5-8

Delete these tables because there are no ARARs (soil regulated under State standards only).

Table 5-9 (renumber after eliminating the earlier three tables) - Should add federal Cancer Slope Factors (CSF) and Reference Dose (RfD) as TBCs because they were used to determine risks from groundwater.

For the CT Remediation Standard Regulations change the “Evaluation/Action to be Taken” text to: “The Alternative does not comply with the standards because no action would be taken to prevent improper use of groundwater in violation of the standards.”

Table 5-10 (renumber after eliminating the earlier three tables) - Remove “Natural Attenuation With” from the table’s title.

Add federal Cancer Slope Factors (CSF) and Reference Dose (RfD) as TBCs because they were used to determine risks from groundwater.

Move CT Remediation Standard Regulations to the new Action-specific Table (see below), since they apply to monitoring and institutional controls.

New Table 5-11 (renumber after eliminating the earlier three tables) - Action-specific ARARs for Alternative GW2 - Should include (see Table 4 for specific citations):

Federal

Safe Drinking Water Act MCLs as relevant and appropriate if used for monitoring.

CWA Section 402 and 403 are applicable if any groundwater removed during well installation or monitoring is either discharged in a surface water body or disposed to a POTW.

RCRA, Subtitle C as applicable pertaining to the handling and disposal of contaminated groundwater during well installation and monitoring (cite the specific CT hazardous waste regulations for the applicable sections - Identification and Generator Standards

State

Remediation Standard Regulations are applicable since they apply to monitoring and institutional controls for groundwater.

Water Quality Standards as applicable if used for monitoring.

Hazardous Waste Management as applicable pertaining to the handling and disposal of contaminated groundwater during well installation and monitoring (*see* RCRA Subtitle C, above).

List Water Pollution Control as applicable if any groundwater removed during well installation or monitoring is discharged to a surface water body.

Guidelines for Soil Erosion and Sediment Control are TBC pertaining to well installation.

- p. 6-1, §6.0 Add a new third sentence: “Contaminated soils were determined to only pose a risk based on State standards. Groundwater was determined to pose a risk based on federal standards under CERCLA and the NCP.”
- In the fourth sentence insert after “are developed”: “based on State standards for soils and for federal standards for groundwater.”
- p. 6-1, §6.1 In the first sentence after “Section 4” insert “(for groundwater only).”
- p. 6-7, §6.2.4 The screening criteria must meet State standards, rather than federal standards under CERCLA and the NCP.
- p. 6-7, §6.2.4.2 Remove the last sentence since no five-year reviews would be required (not a CERCLA action).
- p. 6-8, ¶1 The last sentence implies that a federal risk is present that has not been identified elsewhere in the text (*see* § ES.3.2.4, including table). If there is a federal risk then the comments for this section pertain to only State criteria applying to soil is not accurate and federal standards under CERCLA and the NCP would be applicable.
- p. 6-8, ¶5 No five year review is applicable (not a CERCLA action), so there are no costs.
- p. 6-13, §6.2.5 The analysis and assembly should be based on State standards, not federal standards (*i.e.*, the NCP). Therefore the nine criteria under the NCP are not the proper criteria for analyzing the options.
- In particular, there are no ARARS for the options.
- p. 6-14, ¶2 In the last sentence, remove compliance with ARARS.
- p. 6-14, ¶3 Remove this paragraph, since there are no ARARS.
- p. 6-17, §6.2.5.2 In the first sentence of the second paragraph, remove “other than mandatory five-year reviews.”
- In the third paragraph, change the title of Alternative S2 to: “Monitoring and Institutional Controls with Permeable Cover.”
- In the fourth paragraph, add a new second sentence: “In the event of a property transfer and with confirmation that contaminated soil remains

- at the site, a deed notification would be used to prohibit exposure to contaminated soil.”
- In the fifth paragraph, replace “Natural attenuation” with “Natural degradation.”
- p. 6-18, §6.2.5.3 In the second paragraph, change the first sentence to: “No activities would be conducted for this site.”
- p. 6-19, ¶2 Remove the paragraph since there are no ARARs.
- p. 6-19, ¶9 There will be no 5-year review costs.
- p. 6-20, ¶2 Change title to: “Monitoring and Institutional Controls with Permeable Cover.”
- p. 6-20, ¶4 In the first sentence, change “attenuation” to “degradation.”
- Review the last sentence regarding 5-year reviews.
- p. 6-21, ¶1 Change “attenuating” to “degrading.”
- p. 6-21, ¶2 Remove the paragraph since there are no ARARs.
- p. 6-22, ¶1 Change the first sentence to: “This alternative would be easy to implement.”
- p. 6-22, ¶2 There are no 5-year review costs for this alternative since it is being remediated under State standards.
- p. 6-22, ¶5 Remove this subsection since there are no ARARs.
- p. 6-27, ¶3 Replace “attenuation” with “degradation.”
- p. 6-27, ¶4 Replace “attenuate” with “degrade.”
- p. 6-28, ¶5 Replace “attenuate” with “degrade.”
- p. 6-33, §6.3.5.1 In the title of Alternative GW2 remove “Natural Attenuation With.”
- p. 6-34, ¶4 In the second sentence change “natural attenuation” to “natural degradation.”

- p. 6-34, ¶5 Replace “attenuate” with “degrade.”
- p. 6-35, ¶1 Replace the second and third sentences with: “Alternative GW1 does not comply with chemical-specific ARARs, since it does not prevent use of the contaminated groundwater in violation of applicable State Class GB standards.”
- p. 6-35, ¶9 In the title of Alternative GW2 remove “Natural Attenuation With.”
- In the first sentence, change “natural attenuation” to “natural degradation.”
- p. 6-36, ¶4 In the third sentence, change “natural attenuation” to “natural degradation.”
- p. 6-36, ¶8 In the second sentence, change “natural attenuation” to “natural degradation.”
- p. 6-37, ¶2 In the second sentence, change “natural attenuation” to “natural degradation.”
- p. 6-37, ¶4 In the fourth sentence, change “natural attenuation” to “natural degradation.”
- Replace the last sentence with: “Alternative GW2 does comply with action-specific ARARs that address using federal MCLs and State water quality standards for monitoring of contaminant levels and federal and State hazardous waste standards for the handling of contaminated groundwater during well installation and monitoring. No location-specific ARARs are applicable to Alternative GW2.”
- p. 6-38, ¶3 Change the sentence to: “Monitoring activities will not pose any short-term risks to the community, workers, or environment.”
- p. 6-38, ¶5 Replace “Because no remedial action is occurring, this alternative would” with “Monitoring activities and implementing institutional controls will.”
- p. 6-40, §6.4 Table For the title of Alternative S1 add “Monitoring and” and for the title of GW2 remove “Natural Attenuation with.”
- p. 6-41, §6.4.1 In the second title remove “Natural Attenuation with.”

- In the second paragraph after “Alternative S2-“ add “Monitoring, “ and remove “Natural Attenuation with” after “Alternative GW2.”
- p. 6-41, §6.4.1 In the second sentence of the third bullet, replace “natural attenuation” with “natural degradation.”
- p. 6-41, bullet 4 The plan for soil monitoring needs to comply with State remediation standards.
- p. 6-42, ¶1 In the first sentence, replace “natural attenuation” with “natural degradation.”
- p. 6-42, bullet 2 Add at the end “for groundwater contamination only.”
- p. 6-43, §6.4.2 For the Comparative Analysis, soil remediation alternatives need to be compared using State remediation criteria, while groundwater alternatives need to be assessed under federal NCP criteria.
- The subsections as written pertaining to the NCP criteria need to be revised to pertain to groundwater only. New subsections need to be developed that discuss soil remediation compliance with State standards (for example - there is no ARARs evaluation for soils).
- p. 6-44, ¶3 Remove “Natural Attenuation with.”
- p. 6-45, ¶4 In the first sentence, replace “natural attenuation” with “natural degradation.”
- p. 6-46, §6.4.2.7 The Navy’s rationale for listing the annual O&M costs is reasonable because this table presents a summary of costs that are a compilation of costs listed separately in Appendix E. However, based on the rationale expressed in the response to EPA comment, consideration might be given to adding text in Section 6.4.2.7 to explain that the annual O&M costs presented are estimates based on present dollars and do not account for inflation or the future value of money. Also, please check capital cost for Alternative 3. It appears that this should be \$1,458,900 rather than \$1,458,200.
- p. 6-47, Table Remove “Natural Attenuation with” from the title of Alternative 2.
- Tables 6-4, 6-5, Remove, since there are no ARARs for soils (State standards only).

6-6, & 6-7

Table 6-9 (renumber after eliminating the earlier three tables) - Should add federal Cancer Slope Factors (CSF) and Reference Dose (RfD) as TBCs because they were used to determine risks from groundwater.

For the CT Remediation Standard Regulations change the "Evaluation/Action to be Taken" text to: "The Alternative does not comply with the standards because no action would be taken to prevent improper use of groundwater in violation of the standards."

Table 6-10 (renumber after eliminating the earlier three tables) - Remove "Natural Attenuation With" from the table's title.

Should add federal Cancer Slope Factors (CSF) and Reference Dose (RfD) as TBCs if used to determine risks from groundwater.

Move CT Remediation Standard Regulations to the new Action-specific Table (see below), since they apply to monitoring and institutional controls.

New Table 6-11 (renumber after eliminating the earlier three tables) - Action-specific ARARS for Alternative GW2 - Should include (see Table 4 for specific citations):

Federal

Safe Drinking Water Act MCLs as relevant and appropriate if used for monitoring.

List CWA Section 402 and 403 as applicable if any groundwater removed during well installation or monitoring is either discharged in a surface water body or disposed to a POTW.

List RCRA, Subtitle C as applicable pertaining to the handling and disposal of contaminated groundwater during well installation and monitoring (cite the specific CT hazardous waste regulations for the applicable sections - Identification and Generator Standards

State

List Remediation Standard Regulations as applicable since they apply to monitoring and institutional controls for groundwater.

List Water Quality Standards as applicable if used for monitoring.

List Hazardous Waste Management as applicable pertaining to the handling and disposal of contaminated groundwater during well installation and monitoring (*see* RCRA Subtitle C, above).

List Water Pollution Control as applicable if any groundwater removed during well installation or monitoring is discharged in a surface water body.

List the Guidelines for Soil Erosion and Sediment Control as TBC pertaining to well installation.

New Table 6-12 - Chemical-specific ARARs for Alternative GW-3 - Should include Cancer Slope Factors and Reference Dose as TBC and cite how extraction and off-site discharge will be compliant.

Change Table 6-11 in the draft to 6-13 (but then need to renumber after eliminating the earlier three tables) - Action-specific ARARs for Alternative GW3 - Should include (*see* Table 4 for specific citations):

Federal

Safe Drinking Water Act MCLs is relevant and appropriate if used for monitoring.

RCRA, Subtitle C is applicable pertaining to the handling and disposal of contaminated groundwater during extraction, well installation and monitoring (cite the specific CT hazardous waste regulations for the applicable sections - Identification and Generator Standards

State

Remediation Standard Regulations are applicable since they apply to extracting and treating groundwater.

Water Quality Standards are applicable if used for monitoring.

List Hazardous Waste Management as applicable pertaining to the handling and disposal of contaminated groundwater during extraction, well installation and monitoring (*see* RCRA Subtitle C, above).

List the Guidelines for Soil Erosion and Sediment Control as TBC pertaining to well installation and extraction activities.

Appendix C,
Table C-3

The CRSR numbers for residential soil PRGs were selected. While the CRSR numbers fall within the EPA risk range, they result in a 10E-05 or 10E-04 risk. As discussed previously, the NCP requires PRGs associated with the 10E-06 risk as the point of departure for risk management. This approach should be used to account for the additive risks from several COCs that could result in the total risk exceeding 10E-04. Please estimate volumes and costs based on different PRGs for different targeted risks instead of selecting one PRG based on the RSRs and calculated volume/costs based on that PRG.

Appendix D, Site 3

Revisions based on an earlier EPA comment are acceptable with the exception of the following:

- Figure S-1 should be Figure D-1 in the revised document.
- Contrary to the response, the distances between sections as presented in the calculations for the draft document have not been retained as the correct distances. However, the area of contamination has been revised based on TPH contamination only so it is now smaller and the previous section locations have been revised accordingly. The revised document has distances between sections that are consistent in the figure and the calculations. Therefore, the result is acceptable.
- Figure D-2, which is now Figure D-6 in the revised document, has not been revised in accordance with the response. The information depicted in the figure has not changed and neither has the title of the figure. Please review the figure and their response and make appropriate corrections.
- The assumption in the calculations in Section 1.3.2 on page 2 of 7 that only 18 gallons of petroleum is in the soil does not appear to be consistent with Figure D-6, which shows a potential area of free petroleum contamination. Please review and make appropriate corrections.
- In the calculations in Section 2.3.3 on page 3 of 7, the mass of contamination calculated appears too low based on the assumed concentration of 10 µg/L combined for all contaminants. Also, the final mass calculation should include the contaminant density, which for chlorinated solvents is generally 1.5 times the density of water (*i.e.*, 12, not 8.34, pounds per gallon). Please review and make appropriate corrections.