

N62661.AR.002505
NS NEWPORT
5090.3a

LETTER AND U S EPA REGION 1 ADDITIONAL COMMENTS TO REVISED DRAFT
FEASIBILITY STUDY SITE 8 NS NEWPORT RI
9/8/2011
U S EPA REGION 1



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

September 8, 2011

Maritza L. Montegross
Remedial Project Manager
NAVFAC MIDLANT, Code OPNEEV
9742 Maryland Avenue, Bldg. Z-144
Norfolk, VA 23511-3095

Re: Revised Draft Feasibility Study
Site 08, NUSC Disposal Area RI/FS
NAVSTA Newport, Rhode Island
July 2011

Dear Ms. Montegross:

EPA has completed its review of the "Revised Draft Feasibility Study for Site 08, NUSC Disposal Area," dated July 2011, as prepared by Tetra Tech NUS, Inc., on behalf of Naval Station Newport, RI. The Revised Draft Feasibility Study (FS) summarizes the site history, offers remedial action objectives, and develops and evaluates remedial alternatives designed to remediate site soils, groundwater, and sediments. EPA evaluated the Revised Draft FS to determine if it was consistent with CERCLA, the NCP, EPA's "Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (October 1998), and other applicable EPA guidance and policies. In addition, EPA evaluated the Revised Draft FS for consistency, technical accuracy, and completeness.

EPA issued comments on this document on August 11, 2011. As indicated in the cover letter, those comments were partial comments. Enclosed please find additional EPA comments on the Revised Draft FS, primarily related to revisions that need to be made to the ARARs tables within the document. EPA requests that the Navy provide revised ARARs tables with its responses to these comments to ensure that we are in agreement on the ARARs prior to issuance of the Draft Final FS.

As also agreed to in our August 11, 2011 letter, EPA reviewed the Biohlor modeling details, relevant to Appendix D of the Revised Draft FS, which were provided by the Navy on August 9, 2011. The input data for the modeling is consistent with that summarized in Appendix D. However, as noted in EPA's August 11, 2011 comments on the Biochlor modeling, many of the input parameters used are not site-specific or are based on limited site data, are based on unsubstantiated estimates of treatment performance, and in some cases use values that favor natural attenuation as compared to model default values and literature values. The modeling would be more informative if sensitivity analyses were performed to address these issues. EPA will continue to

evaluate the results of the Biochlor modeling upon receipt of Navy's responses to our comments on the Revised Draft FS.

Please also note that all comments on the Revised Draft FS should be addressed, as appropriate, throughout the document (i.e., if revisions are required to address a comment, ensure that additional revisions are made throughout the document, where appropriate, so that the comment is consistently addressed in the Draft Final FS).

EPA again advises Navy to include adequate time on the agenda of the September 21, 2011 RPM meeting for comment resolution discussion. If you have any questions, please contact me at (617) 918-1754 or at lombardo.ginny@epa.gov.

Sincerely,



Ginny Lombardo
Remedial Project Manager

Attachment

cc: Pamela Crump, RI DEM
Deb Moore, NAVSTA Newport
James Ropp, TtNUS
Stephen Parker, TtNUS
Ken Munney, USF&W
Chau Vu, EPA
Bart Hoskins, EPA
David Peterson, EPA
Greg Kemp, Mabbett & Associates, Inc.

**EPA Additional Comments on
Revised Draft Feasibility Study for
Site 8 -- NUSC Disposal Area
July 2011**

General Comment:

1. Throughout the FS, it is unclear where the Navy intends to allow “limited recreation” (page 2-9, Section 2.3.1). If limited recreation is to be allowed in any area where soil contamination is present, the LUCs need to identify the allowed recreational uses and where recreational use will not be permitted.
2. With respect to LUCs for groundwater, the FS should address whether groundwater uses beyond consumption need to be considered in the LUCs. EPA would expect that the groundwater LUCs would prevent all uses of groundwater (e.g., consumption, irrigation, etc.) or show that other uses do not pose an unacceptable risk. The FS should include a discussion of how groundwater LUCs may impact adjacent property owners and how that will be addressed in the LUC RD.

Specific Comments:

1. Page ES-2: Revise the RAOs to be consistent with the RAOs listed in Section 2.3.1.
2. Page 2-4, Section 2.1.4.1, Groundwater: In the first sentence change: “Federal MCLs and non-zero Maximum Contaminant Level Goals (MCLGs) for drinking water” to “Federal MCLs, non-zero Maximum Contaminant Level Goals (MCLGs), and federal risk-based standards for drinking water.”
3. Page 2-4, Section 2.1.4.1, Groundwater: Replace the last sentence with: “As discussed in EPA groundwater remediation guidance, in State’s without an EPA-approved CSGWPP, CERLCA groundwater remediation must meet federal MCLs and risk-based standards.”
4. Page 2-4, Section 2.1.4.2: Remove the third sentence since floodplain standards would apply if the remedial action (even if not in a mapped floodplain) could cause downstream flooding (for instance through management of water levels at the dam) and the federal/state coastal zone for the base extends across the operable unit.
5. Page 3-16, Section 3.3.6, Onsite Landfilling, Implementability: Add at the end of the third sentence: “or the RI Remediation Regulations, depending on the characteristics of the waste and the regulatory status of the disposal area.”
6. Page 3-42 – 3-43, Section 3.7.1, Reduction of Toxicity: Remove all references to recycling meeting this criterion.
7. Page 4-7, Section 4.2.1, Long Term Effectiveness: Add at the end of the last sentence: “(following federal TBC risk guidances) and exceeding RI Remediation Regulation criteria.”

8. Page 4-9, Section 4.2.2, Compliance with ARARs: If PCB levels in the soil exceed 1 ppm, the Navy needs a separate EPA finding under TSCA that the proposed alternative will not pose an unreasonable risk of injury to health or the environment.
9. Page 6-8, Section 6.2.1, Compliance with ARARs: In the last sentence change: “from state and federal regulations” to “from federal regulations and risk-based standards derived from federal TBC guidances.”
10. Page 6-10, Section 6.2.2 and Page 6-13, Section 6.2.3; Compliance with ARARs: The alternatives only meet ARARs if the remedial actions can meet EPA sediment remediation guidance standards and federal ecological risk-based standards for freshwater sediments. The Navy needs a separate EPA finding under TSCA that the proposed PCB cleanup standard is protective and the remediation process (including management and dewatering of excavated sediments containing PCBs) will not pose an unreasonable risk of injury to health or the environment. To satisfy federal and State wetland and floodplain standards, the alternative needs to include mitigation to replace alteration of wetland resources and lost flood storage capacity (or show that filling in the shoreline of the alteration of waterways and waterbodies will not increase the risk of downstream flooding). The alternative needs to identify mitigation measures that will be taken.
11. Page 6-15, Section 6.2.4, Compliance with ARARs: The Navy needs a separate EPA finding under TSCA that the proposed PCB cleanup standard for the stream and pond sediments is protective and that the remediation process (including management and dewatering of excavated sediments containing PCBs) will not pose an unreasonable risk of injury to health or the environment. To satisfy federal and State wetland standards the alternative needs to include mitigation to replace alteration of wetland/aquatic habitat resources. The alternative needs to identify mitigation measures that will be taken.
12. Table 2-1: Refer to EPA’s November 22, 2010 comments on the August 2010 Draft FS, Comment 1. Revise Table 2-1 to address this ARARs comment. The “consideration” text proposed in the original comment can be revised, as appropriate, to reflect the Navy’s remedial plan for restoring groundwater throughout the site (i.e., not using the waste management area designation). [The language in the “consideration” text for “National Primary Drinking Water Regulations”, page 2 of 2, is acceptable.] The VI Guidance, noted as a TBC in the November 22, 2010 Comment 1, does not need to be included. In addition, remove the last line of the Table (Water Quality Regulations).
13. Table 2-2, Page 1: Although the “Floodplain Management” ARARs text is consistent with EPA’s November 22, 2011 Comment 3, EPA requests that the “Floodplain Management” ARAR be replaced with the following to be consistent with more recent ARARs decision documents:

Floodplain Management and Protection of Wetlands, 44 C.F.R. 9	Relevant and Appropriate	Remedial alternatives that may cause alteration within a 500-year floodplain/cause negative impacts to downstream floodplain or that will cause alteration of federal jurisdictional wetlands/aquatic habitats will be implemented in compliance with these relevant and appropriate FEMA standards (which promulgate requirements under Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands)). Prohibits activities that adversely affect a federally-regulated wetland unless there is no practicable alternative and the proposed action includes all practicable measures to minimize harm to wetlands that may result from such use. Requires soliciting public comment on any disturbance of floodplains or federally-regulated wetlands.	The effects the remedial action, particularly in regard to the sediment and soil alternatives, on federal jurisdictional wetlands will be evaluated. All practicable means will be used to minimize harm to the wetlands. Wetlands disturbed by sediment remediation, monitoring, or other remedial activities will be mitigated in accordance with requirements. The site is upstream of coastal flood zone. Remedial actions that involve remedial activities that may affect downstream floodplain areas will include all practicable means to minimize harm to and preserve beneficial values of floodplains. The Navy will solicit public comment regarding proposed impacts to wetlands and floodplains in the Proposed Plan. The comments received will be addressed in the Responsiveness Summary in the ROD for this operable unit.
---	--------------------------	---	--

In addition, add the Federal Coastal Zone Management ARAR noted in EPA’s November 22, 2011 letter, Comment 3. If there are potential historic or archeological resources within the operable unit area (e.g., the dam or any structure more than 50 years old), add appropriate federal and state historic preservation ARARs.

14. Table 2-2: Refer to EPA’s November 22, 2010 comments on the August 2010 Draft FS, Comment 4. Revise Table 2-2 to address the ARARs revisions outlined in this comment.

15. Table 2-3, Page 1: Although the “TSCA” ARARs text is consistent with EPA’s November 22, 2010 Comment 6 proposed language, the “synopsis” and “consideration” text should be revised to the following for clarity. [Although PCBs are not a COC for soil, PCBs were found in soils above screening criteria.]

Toxic Substances Control Act (TSCA); PCB Remediation Waste, 40 C.F.R. 761.61(c)	Applicable	This section of the TSCA regulations provides risk-based cleanup and disposal options for PCB remediation waste based on the risks posed by the <i>in-situ</i> concentrations at which the PCBs are found. Written approval for the proposed risk-based cleanup must be obtained from the Director, Office of Site Remediation and Restoration, U.S. Environmental Protection Agency (USEPA) Region 1.	All sediment and soil exceeding identified PCB cleanup levels will either be removed, dewatered (if required) and disposed of off-site or will be placed under a cover system that meets TSCA protectiveness standards. The dredging, transportation/dewatering, and management of PCB contaminated media will be performed in a manner to comply with TSCA, including air and surface water monitoring during remedial activities. The Navy will obtain a finding by the Director, Office of Site Remediation and Restoration, EPA Region 1, that the remedy’s sediment and soil PCB cleanup levels, along with the dredging, dewatering, and management of the contaminated media will not pose an unreasonable risk to human health or the environment.
---	------------	--	--

16. Table 2-3: EPA's November 22, 2010 letter, Comment 6, included proposed revisions to Table 2-3. Some of the proposed revisions are addressed in the Revised Draft FS, Table 2-3. However, not all proposed revisions were made and some of the ARARs included in the August 2010 Draft FS version were deleted and need to be re-incorporated into Table 2-3. To address these inconsistencies, add these additional federal action-specific ARARs:

Safe Drinking Water Act (42 U.S.C. §300f et seq.); National primary drinking water regulations (40 C.F.R. 141, Subparts B and G)	Relevant and Appropriate	Establishes MCLs for common organic and inorganic contaminants applicable to public drinking water supplies. Used as relevant and appropriate standards for aquifers and surface water bodies that are potential drinking water sources.	Under federal standards, groundwater within the Site is considered a potential drinking water source; therefore, groundwater must achieve these standards. Groundwater use restrictions will be maintained until these standards are achieved.
Safe Drinking Water Act (42 U.S.C. §300f et seq.); National primary drinking water regulations (40 C.F.R. 141, Subpart F)	Relevant and Appropriate for non-zero MCLGs only; MCLGs set as zero are To Be Considered.	Establishes maximum contaminant level goals (MCLGs) for public water supplies. MCLGs are health goals for drinking water sources. These unenforceable health goals are available for a number of organic and inorganic compounds.	Under federal standards, groundwater within the Site is considered a potential drinking water source; therefore, groundwater must achieve these standards. Groundwater use restrictions will be maintained until these standards are achieved.
Health Advisories (EPA Office of Drinking Water)	To Be Considered	Health Advisories are estimates of risk due to consumption of contaminated drinking water; they consider non-carcinogenic effects only. To be considered for contaminants in groundwater that may be used for drinking water. The risk-based standard for manganese is 0.3 mg/L.	Groundwater within the Site must achieve this standard. Groundwater use restrictions will be maintained until the standard is achieved.
CWA National Recommended Water Quality Criteria (NRWQC), 40 CFR 122.44)	Relevant and Appropriate	Federal NRWQC are health-based and ecologically based criteria developed for carcinogenic and non-carcinogenic compounds. These standard may be used to develop cleanup standards for sediments	Water quality standards used to develop monitoring standards sediment and soil remedial alternatives at the Site.
Clean Water Act - National Pollutant Discharge Elimination System (NPDES), 40 CFR Parts 122 and 125	Applicable	Establishes the specifications for discharging pollutants from any point source into the waters of the U.S. Includes stormwater standards for activities disturbing more than one acre.	Any water discharged to surface water bodies during remedial activities will comply with this regulation. Best management practices will be used to meet stormwater standards during the remedial action.
Toxic Pollutant Effluent Standards, 40 CFR 129	Applicable	Regulates surface water discharges of specific toxic pollutants, namely aldrin, dieldrin, DDT, endrin, toxaphene, benzidine, and PCBs.	Any water discharged to surface water bodies will meet the standards identified in this regulation.
Clean Air Act, National Emission Standards for Hazardous Air Pollutants (NESHAPs), 42 U.S.C. 7411, 7412; 40 C.F.R. Part 61	Applicable	NESHAPS are a set of emission standards for specific chemicals, including naphthalene, arsenic, cadmium, chromium, lead, mercury, nickel, PCBs, DDE, and hexachlorobenzene. Certain activities are regulated including site remediation.	If remedial activities include thermal treatment these emissions standards will be met. In addition excavation, standards for particulate matter will be met during excavation and handling of contaminated sediments. Activities during construction will include measures to suppress dust.

Generation of investigation derived waste USEPA OSWER Publication 9345.3-03 FS, January 1992	To Be Considered	Management of Investigation-Derived Waste (IDW) must ensure protection of human health and the environment.	IDW will be managed in a manner to protect human health and the environment.
EPA Groundwater Protection Strategy (August 1984; NCP Preamble, Vol 55, No. 46, March 8, 1990, 40 CFR Part 300, p: 8733); Guidelines for Groundwater Classification (November 1986)	To Be Considered	The Groundwater Protection Strategy provides a common reference for preserving clean groundwater and protecting the public health against the effects of past contamination. Guidelines for consistency in groundwater protection programs focus on the highest beneficial use of a groundwater aquifer and define three classes of groundwater. These documents defined Class I, II and III groundwaters.	Under federal standards, groundwater within the Site is considered a potential drinking water source; therefore, groundwater use restrictions will be maintained until these standards are achieved.
Contaminated Sediment Remediation Guidance for Hazardous Waste Sites (EPA-540-R-05-012 OSWER 9355.0-85 December 2005)	To Be Considered	Guidance for making remedy decisions for contaminated sediment sites.	This guidance will be considered in addressing contaminated sediment alternatives involving Monitored Natural Recovery, Thin Layer Capping, Dredging, and/or Cover/Capping. The guidance also addresses dewatering, and disposal of the contaminated sediments.
Clean Water Act; General Pretreatment Regulations for Existing and New Sources of Pollution, 33 U.S.C. § 1251 et seq. 40 CFR Part 403	Applicable	Standards for direct discharge of waste water into a Publicly Owned Treatment Works (POTW).	These standards will apply if water from the remedial action such as from dewatering is discharged to a POTW.
Thermal Treatment, 40 C.F.R. Part 265, Subpart P	Relevant and Appropriate	Standards for air emissions and other operating standards for thermal treatment units.	These standards will apply for alternatives that include thermal treatment.
Management of Undesirable Plants on Federal Lands, 7 U.S.C. 2814	Relevant and Appropriate	Requires federal agencies to establish integrated management systems to control or contain undesirable plant species on federal lands under the agency's jurisdiction.	Measures will be taken to control the establishment of <i>Phragmites</i> , purple loosestrife or other invasive plants within all remediated areas. An invasive species control plan will be developed as part of the long-term O&M for this site.

In addition, add these State ARARs:

Clean Air Act - Emissions Detrimental to Persons or Property	RIGL 23-23 et seq.; CRIR 12-31-07	Applicable	Prohibits emissions of contaminants which may be injurious to humans, plant or animal life or cause damage to property or which reasonably interferes with the enjoyment of life and property.	Monitoring of air emissions during remedial activities will be used to assess compliance with these standards if threshold levels are reached
Drilling of Drinking Water Wells; Rules and Regulations Governing the Enforcement of Chapter 46-13.2 Relating to the Drilling of Drinking Water Wells	RIGL 46-13.2 et seq.	Applicable	Prohibits installing drinking water wells in contaminated aquifers. Establishes standards for decommissioning monitoring wells (Rule 9.03).	Under these standards drinking water wells are prohibited within areas of contamination and monitoring wells used will be properly decommissioned when no longer needed.

17. Table 2-3, State Solid Waste ARARs: All of the State Solid Waste Regulations cited in the OFFTA ROD should be cited in this FS, since both set standards for soil/pavement covers over contaminated soils (14 sections were cited in OFFTA, but only 6 in this FS). The “consideration” text for all of the State Solid Waste ARARs should match the language negotiated with the Navy that was used in the OFFTA ROD (Table A-3, “Action To Be Taken” text).
18. Table 2-3, Page 6: For the first line change the “consideration” text to: “These regulations would apply to the management of any contaminated media that, after testing, is determined to exceed hazardous waste thresholds.”
19. Table 2-5: EPA’s risk-based standard for manganese, as identified in EPA’s Health Advisory, is 300 ug/L and should be used as the PRG/Performance Standard. EPA’s November 22, 2010, Comment 12, requested this be addressed.
20. Tables 4-4 ~ 4-9, Tables 5-4 – 5-12, and Tables 6-4 – 6-12: Make revisions to the alternative specific ARARs tables to ensure that they are consistent with the revisions required to address comments on the Section 2 ARARs tables above and consistent with the ARARs tables in the OFFTA ROD, Appendix A. In addition, in many cases, the information provided in the “Action to be Taken to Attain the ARAR” column is inadequate throughout these ARARs table. Revise the tables to specify how each alternative will achieve the cited ARARs. For the location-specific ARARs Tables, if there are potential historic or archeological resources within the operable unit area (e.g., the dam or any structure more than 50 years old), add appropriate federal and state historic preservation ARARs.
21. Table 5-5, Table 5-8 and Table 5-11: There are location-specific ARARs relating to the installation and O&M of monitoring wells. These ARARs should be included in these tables.