



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

J.F. KENNEDY FEDERAL BUILDING, BOSTON, MASSACHUSETTS 02203-2211

August 5, 1992



Mr. Francisco La Greca
U.S. Department of the Navy
Northern Division
10 Industrial Highway
Code 1823, Mail Stop 82
Lester, PA 19113-2090

Dear Mr. La Greca:

The United States Environmental Protection Agency (EPA) has received and reviewed the "draft" Interim Record of Decision (ROD) for Ground Water Remediation near Tanks 53 and 56 at the Naval Education and Training Center (NETC), Newport, Rhode Island.

EPA's comments regarding this document are provided as attachment I to this letter. Specific comments on the human health risk assessment and ARARs discussions will be provided under separate cover by August 12. Upon satisfactory response to our comments, EPA anticipates that we will provide concurrence on this ROD. According to the schedule agreed to at the February 4, 1992 meeting in Providence, the Navy will respond to comments and resubmit the ROD on August 31, 1992.

In order to facilitate the finalization of the ROD, EPA recommends that a meeting or conference call be scheduled to discuss the attached comments and the Navy's responses. Please contact me at your earliest convenience should you wish to convene such a meeting/conference call.

Thank you in advance for your continued assistance in this matter. Should you have any questions or comments in regards to the attached, please do not hesitate to call me at (617) 573-5764.

Sincerely,

A handwritten signature in cursive script that reads "Carol A. Keating".

Carol A. Keating
Remedial Project Manager
Federal Facilities Superfund Section

cc: Paul Kulpa, RIDEM
Rachel Marino, NETC Newport
Bob DiBiccaro, EPA

Attachments

ATTACHMENT I

The comments provided below are EPA's partial comments pertaining to the draft "Interim Record of Decision (ROD) for Ground Water Remediation near Tanks 53 and 56." This draft ROD was submitted by the U.S. Department of the Navy for the Naval Education and Training Center (NETC) in Newport, Rhode Island.

1. General: Consistent with the 1990 National Contingency Plan (NCP), all references to "public health, welfare, or the environment" should be changed to "human health and the environment."
2. Page 2, Statutory Requirements, 3rd line: The word "legally" should be removed. This is inherit in the definition of an ARAR.
3. Page 4, Table of Contents: The following heading should be revised as indicated:

I - Site Name, Location and Description.
4. Page 1, ¶ 2, 7th line: The word "areas" after "ring drain" should be deleted.
5. Page 1, ¶ 3, 8th line: "and discharges to the Narragansett Bay" should be inserted after the word "site."
6. Page 1, ¶ 4, 1st line: Consistent with language in the Proposed Plan, "fill layer around the tanks" should be inserted after "... consist of a..."
7. Page 2, ¶ 1, 11th line: "... towards residential areas..." Consistent with the requirements outlined in the "ROD Checklist for Interim Remedial Actions," this discussion should specify the location of and distance of the tanks to nearby populations.
8. Page 1, ¶ 1, 13th & 14th lines: Insert definition of "GA-NA" (found in last paragraph on Page 11 of the draft ROD) after "GA-NA" (prior to the second to last sentence).
9. Page 2, Last ¶, 2nd line: Consistent with language in the Proposed Plan, the second sentence should begin, "In addition to permitting two hazardous waste storage areas, the permit stated that tanks 53 and 56..."
10. Page 5, ¶ 2, 1st line: "... describing the..." should be changed to "describing this..."
11. Page 5, ¶ 2, 5th line: "... administrative record information were..." should be changed to "... administrative record information are..."

12. IV - Consistent with language in the Table of Contents, "or Response Action" should be added to the end of this header.
13. Page 5, ¶ 4, 8th line: Consistent with requirements outlined in "ROD Checklist for Interim Ground Water Actions," "to the extent possible" should be inserted at the end of the sentence after the word "site."
14. Page 6, ¶ 4: This discussion needs to be expanded to discuss the interconnectedness of ground water, Gomes Brook and Narragansett Bay. As currently written, it doesn't completely describe the pathways of migration or population and environmental media that could be affected. It is recommended that the third paragraph on page 12 of the Proposed Plan which begins "Water level elevations..." be inserted in place of this paragraph.
15. Page 7, ¶ 2 & ¶ 3: Consistent with language in the 1990 NCP, reference to "public health risk assessment" should be changed to "human health risk assessment."
16. Page 9, ¶ 2, Last sentence: Delete the language in parenthesis at the end of the sentence.
17. Page 13, ¶ 2: Consistent with requirements outlined in the "ROD Checklist for Interim Ground Water Actions," this discussion should include a brief description of the applicable or relevant and appropriate requirements (ARARs) relevant to the proposed interim remedial action.
18. Page 15, ¶ 7: Delete the last sentence "Long-term maintenance may be required for UV/oxidation systems." Some type of long-term maintenance would be required for any type of remedy chosen and only serves to weaken the Navy's argument as to why UV/oxidation is the preferred alternative.
19. Page 15, ¶ 1: This sentence should be modified to read, "... destroying them, ARARs would be attained only with a secondary air treatment process."
20. Page 16, ¶ 3, last sentence: A period should be inserted after the word "phase" and the rest of the sentence deleted. Because air stripping is a commonly chosen remedial alternative, some caution must be used when explaining why it may not be the preferred remedial alternative for this particular remedial action.
21. Page 17, ¶ 2, last sentence: "\$" should be inserted before 2,800,000.

22. Page 17, State Acceptance: Section 8.8 from the Proposed Plan should be inserted into this section. This section should be model language; the State need not submit any additional language.
23. Page 17, last ¶, 10th line: Delete comma after "In instances..."
24. Page 18, ¶ 3: This paragraph should be consistent with the language in the Model Region I ROD. Please modify it to read, "Cleanup levels for compounds in ground water exhibiting non-carcinogenic effects have been set at the MCLG. In the absence of a MCLG, cleanup levels for non-carcinogenic effects have been set at a level thought to be without appreciable risk of an adverse effect when exposure occurs over a lifetime (hazard index =1).
25. Page 19, ¶ 3, last line: "remedies" should be changed to "remedy."
26. Page 20, ¶ 4: EPA has not yet received the summary of ARARs for the selected remedy for this section. Sufficient detail is needed that describes which ARARs must be evaluated for the limited scope of the interim action. This section should be written to provide the type of information presented in this same section of the Brunswick Naval Air Station Interim Remedial Action ROD (attached). Since this material will require EPA Region I Office of Regional Counsel concurrence, it is imperative that I receive this summary as soon as possible.
27. Page 21, ¶ 3: This paragraph should include a brief explanation as to why the chosen alternative provides the best balance among the two remedial alternatives evaluated, e.g. UV/oxidation and air stripping. It should summarize how the selected alternative measured up under each of the five-numbered criteria (as outlined in the model ROD) and include a discussion of which factors were the most determinative in the decision, e.g. long-term effectiveness and permanence through complete destruction of contaminants.
28. Page 2 - Responsiveness Summary - ¶ 2: Because the Navy is the lead agency with EPA and State oversight, reference to contractor's, i.e. TRC, is not necessary and should be deleted.
29. Table 1 - Margaret McDonough, EPA Region I Risk Assessor, is currently reviewing the risk assessment portion of the draft ROD. As previously mentioned, her comments will be submitted under separate cover no later than August 12.

30. Table 3 - This table is very confusing. A separate column should be added which clearly lists the appropriate clean up level for each contaminant of concern.
31. Figure 2 - Site Location Map: Site 2 - Melville North Landfill should be deleted from the map. As you will recall, it was determined during NETC FFA negotiations that this site is not part of the NETC NPL listing.

ATTACHMENT II

APPENDIX A
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

TABLE A-1
CHEMICAL-SPECIFIC ARARs, CRITERIA, ADVISORIES, AND GUIDANCE

ROD: EASTERN PLUME
NAS BRUNSWICK

MEDIA	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>GROUNDWATER/ SURFACE WATER</u>				
<u>Federal</u>	SDWA - MCLs (40 CFR 141.11 - 141.16)	Relevant and Appropriate	MCLs have been promulgated for several common organic and inorganic contaminants. These levels regulate the concentration of contaminants in public drinking water supplies, but may also be considered relevant and appropriate for groundwater aquifers used for drinking water.	Groundwater at NAS Brunswick is not a current source of drinking water; therefore, MCLs are not applicable, but may be relevant and appropriate. To assess the potential risks to human health due to consumption of groundwater, contaminant concentrations were compared to their MCLs.
	SDWA - MCLGs (40 CFR 141.50 - 141.51)	Relevant and Appropriate	MCLGs are health-based criteria. As promulgated under SARA, MCLGs are to be considered for drinking water sources. MCLGs are available for several organic and inorganic contaminants.	The 1990 National Contingency Plan states that non-zero MCLGs are to be used as goals. Because groundwater at NAS Brunswick is not a current source of drinking water, MCLGs are not applicable, but may be relevant and appropriate. Contaminant concentrations in groundwater were compared to their MCLGs.
	RCRA - Subpart F Groundwater Protection Standards, Alternate Concentration Limits (40 CFR 264.94)	Relevant and Appropriate	This requirement outlines standards, in addition to background concentrations and MCLs, to be used in establishing clean-up levels for remediating groundwater contamination.	Most of the MCLs promulgated under RCRA are the same as SDWA MCLs. The standards set forth under RCRA do not reflect recent changes and additions to SDWA MCLs. Because groundwater is not a current source of drinking water; RCRA MCLs are not applicable, but may be relevant and appropriate
	Federal AWQC	Applicable	Federal AWQC include (1) health-based criteria developed for 95 carcinogenic and noncarcinogenic compounds and (2) water quality parameters. AWQC for the protection of human health provide levels for exposure from drinking water and consuming aquatic organisms, and from consuming fish alone. Remedial actions involving contaminated surface water or groundwater must consider the uses of the water and the circumstances of the release or threatened release; this determines whether AWQC are relevant and appropriate.	AWQC will be applicable if treated groundwater is discharged to surface water. The Navy's preferred discharge option is to the Brunswick POTW, although the Navy has not yet received approval from the POTW. AWQC may be considered during development of pretreatment standards because the POTW discharges its effluent to the Androscooggin River.

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continued

TABLE A-1
CHEMICAL-SPECIFIC ARARs, CRITERIA, ADVISORIES, AND GUIDANCE

ROD: EASTERN PLUME
NAS BRUNSWICK

MEDIA	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>Federal Guidance and Criteria To Be Considered</u>	USEPA Risk Reference Doses (RfDs)	To Be Considered	RfDs are the levels considered unlikely to cause significant adverse health effects associated with a threshold mechanism of action in human exposure for a lifetime.	Because there are only a limited number of promulgated standards for contaminants in soil and water, USEPA RfDs were used to characterize risks due to noncarcinogens in various media.
	USEPA Human Health Assessment Group Cancer Slope Factors (CSFs)	To Be Considered	Carcinogenic effects present the most up-to-date information on cancer risk potency derived from USEPA's Human Health Assessment Group.	Because there are only a limited number of promulgated standards for contaminants in soil and water, USEPA CSFs were used to compute the individual incremental cancer risk resulting from exposure to certain compounds.
<u>State</u>	Maine Drinking Water Rules (10-144A CMR Chapters 231-233)	Relevant and Appropriate	Maine's Primary Drinking Water Standards are equivalent to federal MCLs. When state levels are more stringent than federal levels, the state levels may be used.	Groundwater at NAS Brunswick is not a current source of drinking water; therefore, State Drinking Water Standards are relevant and appropriate. Contaminant concentrations in groundwater were compared to State standards to assess the potential risks to human health due to consumption of groundwater.
	Maine Regulations Relating to Water Quality Criteria for Toxic Pollutants (MEDEP Regs, Chapter 584)	Applicable	This rule limits the concentrations of certain materials allowed in Maine waters to prevent the occurrence of pollutants in toxic amounts as required by state and federal law. Except if naturally occurring, ambient levels of toxic pollutants shall not exceed the Clean Water Act AWQC. Where AWQC do not exist, the Board of Environmental Protection shall adopt site-specific numerical criteria.	This rule will be applicable if treated groundwater is discharged to surface water. The Navy's preferred discharge option is to the Brunswick POTW, although the Navy has not yet received approval from the POTW. AWQC will be considered during development of pretreatment standards. This rule is potentially applicable in development of pretreatment standards if AWQC do not exist for any contaminants present in groundwater.

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continued

TABLE A-1
CHEMICAL-SPECIFIC ARARs, CRITERIA, ADVISORIES, AND GUIDANCE

ROD: EASTERN PLUME
NAS BRUNSWICK

MEDIA	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>State Criteria and Guidance To Be Considered</u>	Rules Relating to Testing of Private Water Systems for Potentially Hazardous Contaminants (10-144A CMR Chapter 233, Appendix C)	To Be Considered	Appendix C outlines Maximum Exposure Guidelines (MEGs) for organic and inorganic compounds. MEGs include health advisories, which are maximum allowable concentrations of specific contaminants in drinking water.	MEGs have been considered for chemical compounds for which there are no promulgated standards. MEGs may be considered if treated groundwater is discharged back to groundwater. The Navy's preferred discharge option is to the Brunswick POTW; however the Navy has not yet received approval from the POTW. MEGs may potentially be considered during development of discharge limits for reinjection of treated groundwater.

Notes

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- ARAR = Applicable or Relevant and Appropriate Requirement
 - AWQC = Ambient Water Quality Criteria
 - CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
 - CFR = Code of Federal Regulations
 - CMR = Code of Maine Rules
 - CPF = carcinogenic potency factor
 - FS = feasibility study
 - MCL = Maximum Contaminant Level
 - MCLG = Maximum Contaminant Level Goal
 - MEG = Maximum Exposure Guidelines
 - MEDEP = Maine Department of Environmental Protection
 - MRSA = Maine Revised Statutes Annotated
 - NAS = Naval Air Station
 - OSWER = Office of Solid Waste and Emergency Response
 - RI = remedial investigation
 - RCRA = Resource Conservation and Recovery Act
 - RfD = reference dose
 - SARA = Superfund Amendments and Reauthorization Act
 - SDWA = Safe Drinking Water Act
 - USEPA = U.S. Environmental Protection Agency

TABLE A-2
LOCATION-SPECIFIC ARARs, CRITERIA, ADVISORIES, AND GUIDANCE

ROD: EASTERN PLUME
NAS BRUNSWICK

MEDIA	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>State</u>	Maine Natural Resources Protection Act (38 MRSA, Section 480-A through S)	Applicable	This act outlines requirements for certain activities adjacent to any freshwater wetland greater than 10 acres or with an associated stream, brook, or pond or adjacent to a coastal wetland. The activities must not unreasonably interfere with certain natural features, such as natural flow or quality of any waters, nor harm significant aquatic habitat, freshwater fisheries, or other aquatic life.	Because piping will need to be extended across Mere Brook, this regulation is applicable. Remedial activities will need to meet the substantive requirements of this Act.
	Natural Resources Protection Act, Permit by Rule Standards (MEDEP Regs, Chapter 305)	Applicable	This rule outlines prescribed standards for specific activities that may take place in or adjacent to wetlands and water bodies.	Because piping will need to be extended across Mere Brook, this regulation is applicable. Activities involving disturbance of soil material within 100 feet of the normal high water line, will be designed to incorporate all applicable standards.
	Maine Standards for Classification of Minor Drainages (38 MRSA, Section 468)	Applicable	Mere Brook is classified as a Class B water under the state water quality standards. Class B waters are defined as suitable for drinking water (after treatment), fishing, recreation in and on the water, and as habitat for fish and other aquatic life.	These regulations apply to activities conducted adjacent to Mere Brook. Remedial construction should not result in the degradation of water quality classification. These regulations may also potentially apply if treated groundwater is discharged to surface water. The Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. The designated uses of the waters receiving either direct discharge or POTW effluent must be considered and protected by developing either discharge limits or pretreatment standards.
	Maine Natural Resources Protection Act (38 MRSA, Section 480-A through S)	Applicable	A permit application must be submitted and approved by the Maine Bureau of Land Quality Control and Section 480-D performance standards met when conducting activities adjacent to any freshwater wetland greater than 10 acres or with an associated stream, brook, or pond.	Substantive requirements of this regulation apply to activities conducted adjacent to Mere Brook. However, a permit is not required for the selected remedy since the administrative permit requirement are waived for remedial activities conducted on-site at federal Superfund sites.

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continued

TABLE A-2
LOCATION-SPECIFIC ARARs, CRITERIA, ADVISORIES, AND GUIDANCE

ROD: EASTERN PLUME
NAS BRUNSWICK

MEDIA	REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
	Maine Standards for Classification of Groundwater (38 MRSA, Section 470)	Applicable	This law requires the classification of the state's groundwater to protect, conserve, and maintain groundwater resources in the interest of the health, safety, and general welfare of the people of the state. Under the Maine standards, groundwater is classified as GW-A.	This regulation will apply if treated groundwater is discharged back to groundwater. The Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. If discharge to groundwater is employed, the classification and uses of groundwater will be evaluated during development of discharge limits.
	Maine Site Location Development Law and Regulations (38 MRSA Sections 481-490; MEDEP Regs, Chapters 371-377)	Applicable	This act and associated regulations govern new developments, including those that handle hazardous waste. New developments cannot adversely affect existing uses, scenic character, or natural resources in the municipality or neighboring municipality.	Those regulations concerning No Adverse Environmental Impact (i.e., Chapter 375) are applicable to implementation of the interim remedy. In particular, standards for protection of groundwater would apply to construction and groundwater treatment activities. However, any licenses required, by reference, will not need to be obtained since permits are not required for actions conducted on-site at federal Superfund sites.

Notes:

- ARAR = Applicable or Relevant and Appropriate Requirements
- CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
- CFR = Code of Federal Regulations
- CWA = Clean Water Act
- MRSA = Maine Revised Statutes Annotated
- MEDEP = Maine Department of Environmental Protection
- NAS = Naval Air Station
- RI/FS = Remedial Investigation/Feasibility Study
- RCRA = Resource Conservation and Recovery Act

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TABLE A-3
ACTION-SPECIFIC APPLICABLE AND RELEVANT AND APPROPRIATE REQUIREMENTS

ROD: EASTERN PLUME
NAS BRUNSWICK

REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>Federal</u>			
RCRA - General Facility Standards (40 CFR 264.10-264.18)	Relevant and Appropriate	General facility requirements outline general waste analysis, security measures, inspections, and training requirements.	The waste material at Sites 4, 11, and 13 have not been formally defined as a RCRA-regulated waste; therefore, only sections of the facility standards are relevant and appropriate. All other relevant general requirements will be incorporated into the construction and operation of the groundwater treatment plant.
RCRA - Preparedness and Prevention (40 CFR 264.30-264.37)	Relevant and Appropriate	This regulation outlines requirements for safety equipment and spill-control for hazardous waste facilities. Part of the regulation includes a requirement that facilities be designed, maintained, constructed, and operated to minimize the possibility of an unplanned release that could threaten human health or the environment.	Because toxic constituents are present within the Eastern Plume groundwater, preparedness and prevention requirements are relevant and appropriate to the implementation of the selected remedy. During remedial construction, safety and communication equipment will be installed at the site, and local authorities will be familiarized with site operations.
RCRA - Contingency Plan and Emergency Procedures (40 CFR 264.50-264.56)	Relevant and Appropriate	This regulation outlines the requirements for emergency procedures to be used following explosions, fires, etc.	Because toxic constituents are present in Eastern Plume groundwater, contingency plans and emergency procedures are relevant and appropriate to the implementation of the selected remedy. Plans will be developed and implemented during site work including installation of extraction wells, and implementation of site remedies. Copies of the plans will be kept on-site.
RCRA - Miscellaneous Units (40 CFR 264.600-264.999)	Relevant and Appropriate	These standards are applicable to miscellaneous units not previously defined under existing RCRA regulations. Subpart X outlines performance requirements that miscellaneous units be designed, constructed, operated, and maintained to prevent releases to the subsurface, groundwater, surface water, and wetlands that may have adverse effects on human health and the environment.	Because the selected remedy includes a groundwater treatment plant, the general design, performance, and operating requirements of Subpart X are relevant and appropriate. However, a permit is not required for remedial actions conducted on-site at federal Superfund sites.

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TABLE A-3
ACTION-SPECIFIC APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

ROD: EASTERN PLUME
NAS BRUNSWICK

REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
RCRA Land Disposal Restrictions (40 CFR 268)	To be determined	Land disposal of RCRA hazardous wastes is restricted without specified treatment. It must be determined that the waste, beyond a reasonable doubt, meets the definition of one of the specified restricted wastes and the remedial action must constitute "placement" for the land disposal restrictions to be considered applicable. For each hazardous waste, the LDRs specify that the waste must be treated either by a treatment technology or to a concentration level prior to disposal in a RCRA Subtitle C permitted facility.	During treatment of groundwater, sludge containing hazardous constituents will be generated. The selected remedy includes provisions for analysis of this sludge, including Toxicity Characteristic Leachate Procedure (TCLP) testing. LDRs are potentially applicable if the sludge fails TCLP. The selected remedy does address handling and disposal of the sludge as a hazardous waste, if necessary.
OSHA - General Industry Standards (29 CFR Part 1910)	Applicable	These regulations specify the 8-hour time-weighted average concentration for various organic compounds. Training requirements for workers at hazardous wastes operations are specified in 29 CFR 1910.120.	Because toxic constituents are present in Eastern Plume groundwater, OSHA regulations are applicable. Proper respiratory equipment will be worn if it is impossible to maintain the work atmosphere below designated concentrations. Workers performing activities would be required to have completed specific training requirements.
OSHA - Safety and Health Standards (29 CFR Part 1926)	Applicable	This regulation specifies the type of safety equipment and procedures to be followed during site remediation.	Because toxic constituents are present in Eastern Plume groundwater, OSHA regulations are applicable. All appropriate safety equipment will be on-site. In addition, safety procedures would be followed during on-site activities.
OSHA - Recordkeeping, Reporting, and Related Regulations (29 CFR 1904)	Applicable	This regulation outlines the recordkeeping and reporting requirements for an employer under OSHA.	Because toxic constituents are present in Eastern Plume groundwater, OSHA regulations are applicable. These requirements will apply to all site contractors and subcontractors, and must be followed during all site work.

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TABLE A-3
ACTION-SPECIFIC APPLICABLE R RELEVANT AND APPROPRIATE REQUIREMENTS

ROD: EASTERN PLUME
NAS BRUNSWICK

REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
CWA - NPDES Regulations (40 CFR Parts 122, 125)	Applicable	This requirement implements the NPDES program that specifies the applicable effluent standards, monitoring requirements, and standard and special conditions for direct discharge.	NPDES requirements will be applicable if treated groundwater is discharged to surface water. The Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. Both on- and off-site discharges from CERCLA sites to surface waters are required to meet the substantive CWA NPDES requirements, including discharge limitations, monitoring requirements, and best management practices. Brunswick POTW has a current NPDES permit. A permit would be required if treated groundwater is discharged on-site.
Underground Injection Control Program (40 CFR 144, 146, 147, 1000)	Applicable	These regulations outline minimum program and performance standards for underground injection programs. Technical criteria and standards for siting, operation and maintenance, and reporting and recordkeeping as required for permitting are set forth in Part 146.	This regulation will be applicable if treated groundwater is discharged back to groundwater. The Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. Discharge of treated groundwater, by well injection, must be in accordance with all the criteria and standards in these federal regulations, as well as meet all state Underground Injection Control Program requirements. Treated groundwater must meet all SDWA standards prior to well injection.
CWA - Pretreatment Standards for POTW Discharge (40 CFR Part 403)	Applicable	This regulation specifies pretreatment standards for discharges to a POTW. If treated groundwater is discharged to a POTW, the POTW must have mechanisms available to meet the requirements of the National Pretreatment Program - Introduction of Pollutants which cause pass through or interference are prohibited. Discharges must also comply with any local POTW regulations. If hazardous waste is discharged to the POTW, the POTW may be subject to RCRA permit-by-rule.	This regulation is applicable since the Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. If treated groundwater is discharged to a POTW, the treated water must meet all discharge limitations imposed by the POTW.

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TABLE A-3
ACTION-SPECIFIC APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

ROD: EASTERN PLUME
NAS BRUNSWICK

REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>State</u>			
Maine Rules to Control the Subsurface Discharge of Pollutants by Well Injection (MEDEP Regs, Chapter 543)	Applicable	This regulation prohibits the injection of hazardous waste into or above water-bearing formations via a new Class IV well. The subsurface discharge into or through a Class IV well that would cause or allow the movement of fluid into an underground source of drinking water that may result in a violation of any Maine Primary Drinking Water Standard, or which may otherwise adversely affect public health, is prohibited.	These regulations will be applicable if treated groundwater is discharged back to groundwater. The Navy's preferred discharge option is to the Brunswick POTW, however, the Navy has not yet received approval from the POTW. For discharge to the subsurface, groundwater must be treated to a target clean-up level less than or equal to the Maximum Contaminant Levels (MCLs) for MEGs to be recharged to the aquifer.
Maine Hazardous Waste Management Rules (MEDEP Regs, Chapters 800-802, 850, 851, 853-857)	Relevant and Appropriate	The rules provide a comprehensive program for handling, storage, and recordkeeping at hazardous waste facilities. They supplement the RCRA regulations.	Because these requirements supplement RCRA hazardous waste regulations, they are relevant and appropriate.
6-7 6 Maine Water Pollution Control Law: Conditions of Licenses (38 MRS, Section 414-A)	Applicable	Regulates the discharge of any pollutants. Specifies that the discharge, either by itself or combined with other discharges, will not lower the quality of any classified body of water below such classification. The discharge will be subject to effluent limitations that require application of the best practicable treatment.	The substantive requirements of this regulation will apply if treated groundwater is discharged to surface water. The Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. If treated water is discharged directly to surface water the effluent must receive the best practicable treatment before discharge.
Maine Water Pollution Control Law: Certain Deposits and Discharges Prohibited (38 MRS, Section 420)	Applicable	No person, firm, corporation, or other legal entity shall place, deposit, discharge, or spill mercury or toxic or hazardous substances, either directly or indirectly, into the inland groundwater or surface waters, tidal waters, on the ice, or on the banks thereof, so that the same may flow or be washed into such waters, or in such manner that the drainage therefrom may flow into such waters.	This regulation will apply if treated groundwater is discharged to surface water. The Navy's preferred discharge option is to the Brunswick POTW; however, the Navy has not yet received approval from the POTW. If discharge to surface water is employed, Best Management Practices must be used when handling wastes.

TABLE A-3
ACTION-SPECIFIC APPLICABLE AND RELEVANT AND APPROPRIATE REQUIREMENTS

ROD: EASTERN PLUME
NAS BRUNSWICK

REQUIREMENT	STATUS	REQUIREMENT SYNOPSIS	CONSIDERATION IN THE REMEDIAL PROCESS
<u>State Guidance and Criteria To Be Considered</u>			
MEDEP, Bureau of Water Quality Control, Policy Number 10, "The Discharge of Hazardous Substances to Groundwaters of the State"	To Be Considered	The Bureau will deny applications for waste discharge licenses for the discharge to groundwaters of substances designated by the Board to be hazardous when such substances are present in concentrations exceeding groundwater levels which occur naturally in the area. Exemption may be granted if the groundwater is treated to reduce the concentrations of pollutants discharged to below the level considered safe for drinking water.	This policy will need to be considered if treated groundwater is discharged back to groundwater. The Navy's preferred discharge option is to the Brunswick POTW, however, the Navy has not yet received approval from the POTW. If treated water is discharged to the subsurface, the minimum level of groundwater treatment would be required to provide adequate protection if no other means of disposal is feasible. This policy would only be considered after application of federal and state underground injection control regulations.

Notes:

AHERA	=	Asbestos Hazard Emergency Response Act
CAA	=	Clean Air Act
CERCLA	=	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	=	Code of Federal Regulations
CMR	=	Code of Maine Regulations
CWA	=	Clean Water Act
DOT	=	Department of Transportation (U.S.)
LDRs	=	Land Disposal Restrictions
FS	=	feasibility study
MEDEP	=	Maine Department of Environmental Protection
MEG	=	Maximum Exposure Guidelines
MRSA	=	Maine Revised Statutes Annotated
NAS	=	Naval Air Station
NESHAP	=	National Emission Standards for Hazardous Air Pollutants
NPDES	=	National Pollutant Discharge Elimination System
OSHA	=	Occupational Safety and Health Administration
POTW	=	publicly owned treatment works
RACT	=	Reasonably Available Control Technology
RI	=	remedial investigation
RCRA	=	Resource Conservation and Recovery Act
SDWA	=	Safe Drinking Water Act
TCLP	=	Toxicity Characteristic Leachate Procedure
$\mu\text{g}/\text{m}^3$	=	micrograms per cubic meter
VOC	=	volatile organic compound