



**STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION**



**BUREAU OF WATER MANAGEMENT
PERMITTING, ENFORCEMENT & REMEDIATION DIVISION
FEDERAL REMEDIATION PROGRAM**

December 15, 1997

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

Re: Draft Interim Record of Decision for Defense Reutilization and Marketing Office
Naval Submarine Base New London, Groton, Connecticut

Dear Mr. Evans:

The Department has received and reviewed the *Draft Interim Record of Decision for Defense Reutilization and Marketing Office Naval Submarine Base New London, Groton, Connecticut*, dated November, 1997. This document was submitted on behalf of the Navy by Jean-Luc Glorieux, P.E. of Brown and Root Environmental. It was received by the Department on November 7, 1997. All references to "CGS" mean the Connecticut General Statutes, while all references to RCSA mean the Regulations of Connecticut State Agencies.

General Comments

The State has previously expressed support in a letter dated October 17, 1997 for the proposed remedy as described in the Proposed Plan dated September 1997. The State continues to support the proposed remedy as described in the draft Interim Record of Decision. In general the draft Interim Record of Decision adequately documents the proposed remedy. However, some revisions are necessary to more accurately describe the requirements of the State's Remediation Standard Regulations. These revisions are discussed in detail in the Specific Comments section. For the Navy's convenience, I have also attached a table listing all State Applicable or Relevant and Appropriate Requirements. In addition, several typographical and spelling/ grammatical errors were noted. Our suggestions for changing these are also noted below.

Polluted soil with substances exceeding the pollutant mobility and direct exposure criteria remains on the site. The numeric direct exposure and pollutant mobility criteria, which are contained in Appendices A and B, respectively, of the Regulations, do not apply to these soils, by virtue of the location of the soils with respect to permanent structures, pavement, and the water table at the site. For this reason, it is extremely important that the pavement and engineered cap be maintained through a program of regular inspection and maintenance, together with institutional controls.

Specific Comments

1. Page 1-1 Section 1.0 Site Name, Location, and Description

In the last sentence of the first paragraph, insert "on" between "Reservation", and "Figure 1-1".

2. Page 1-2 Figure 1-1 Location Map

The boundaries of the base should be more clearly defined on this figure. In addition, this figure is poorly reproduced. A more legible copy should be used in the final ROD.

3. Page 1-3 Figure 1-2 DRMO Location Map

This figure is poorly reproduced and difficult to read. A more legible copy should be used in the final ROD.

4. Page 2-1 Section 2.1 Land Use and Site History

A detailed figure depicting the layout of the DRMO should be provided. Alternatively, the reader could be referred to Figure 5-1.

5. Page 4-1 Figure 4.0 Scope and Role of Response Action ¶1

The text should list the specific numbers of sites for which RODs have been issued, or are in other stages of the IR process. This paragraph could be eliminated, or moved to Section 2.2.

¶3

The text states that if surface water protection criteria are exceeded, then monitoring will be expanded to include sediment and surface water. The text should also state that monitoring will be expanded if exceedences of the volatilization criteria are detected. In addition, action beyond increased monitoring may be required if exceedences are detected. The text should state here that after sufficient monitoring data have been acquired, the need for additional remedial action will be evaluated.

6. Page 5-1 Section 5.1 Topography and Surface Features ¶2

Please add "with asphalt" to the end of the first sentence.

7. Page 5-8 Section 5.4 Hydrogeology

The first full paragraph states that "water levels fluctuate by 1.19 feet in monitoring wells", but does not specify which well this fluctuation was observed in. Please modify this discussion to include that information, and the distance of that well from the shore line.

8. Page 5-9 Section 5.5 Ecological Habitat

In the third sentence, please replace "remediated" with "excavated and backfilled". The fourth sentence should be modified to reflect the fact that bituminous concrete was placed over most of the site, rather than just the area which was capped.

9. Pages 5-9 to 5-11 Section 5.6.1 DRMO Soil

This section should briefly discuss the extent to which contaminant concentrations in soil comply with the direct exposure and pollutant mobility criteria. It should also specify that the direct exposure criteria do not apply because the soil is beneath a cap or pavement and is considered to be inaccessible, and that the pollutant mobility criteria do not apply since the soil is located below the seasonal high water table.

10. Page 6-1 Section 6.0 Summary of Site Risks ¶3

In the sixth line, the text should state that risk characterization integrated three earlier steps, rather than two.

11. Page 6-7 Section 6.4.1 Summary of Human Health Risk Characterization ¶2

This paragraph is somewhat confusing and should be rewritten to clarify how conclusions regarding the effects of lead in soil have changed since the Phase 2. Was the unvalidated data referred to in this paragraph subsequently validated? In the sixth sentence, replace "for lead uptake from soil" with "which predicts lead concentrations in blood resulting from exposure to lead at a given concentration in soil".

12. Page 6-19 Section 6.4.6 Discussion of Uncertainty Factors- Sampling and Data Handling

In the second line of this paragraph, "affect" should be replaced with "effect".

13. Page 8-1 Section 8.1 Alternative 1- No Action

The meaning of the phrase in parentheses following the first bullet point is unclear. Both the direct exposure and pollutant mobility criteria of the Remediation Standard Regulations are applicable in

this case.

14. Page 8-2 Section 8.2- Institutional Controls and Monitoring

The first full paragraph is confusing because it refers both to Connecticut's surface water protection criteria and to site- specific surface water protection criteria. Does this mean that the default surface water protection criteria listed in Appendix D to the regulations will be used for some substances, while site specific criteria will be proposed for others? Please modify this paragraph to answer this question.

The third full paragraph should also state that Alternative 2 would comply with the pollutant mobility criteria. This comment applies also to the third full paragraph on page 8-3, and to the second paragraph on page 8-5.

15. Page 8-3 Section 8.3 Alternative 3

For each of the bullet points listed on this page, please indicate whether the ARAR is State, Federal, or both. This comment applies also to page 8-5.

16. Page 9-5 Section 9.2.3- Long-term Effectiveness and Permanence ¶1

In the seventh line, "scenario" should be replaced by "scenarios".

17. Page 10-1 Section 10.0

Please replace all of Section 10 with the new language which was developed by EPA and DEP, and forwarded to the Navy by e-mail on November 24, 1997.

18. Page 11-1 Section 11.1 Protection of Human Health and the Environment

Please revise the text to acknowledge that if contaminants are detected in ground water at concentrations exceeding surface water protection criteria, volatilization criteria, or other standards specified in the Ground Water Monitoring Plan, sampling of other media in addition to surface water and sediment may be required. In addition, active remedial measures may be required if evaluation of monitoring data indicates that the selected remedy is not effective in protecting human health and the environment.

In the last sentence, please insert "volatilization criteria or other standards specified in the Ground Water Monitoring Plan", following "surface water protection criteria".

Please insert a period at the end of the second sentence.

19. Page 11-2 Table 11-1 Chemical Specific ARARs and TBCs

Remediation Standard Regulations- Evaluation/ Action to be Taken

Rather than stating that Institutional Controls will comply with the direct exposure criteria, this section should state that the direct exposure criteria do not apply because the polluted soils are considered to be inaccessible. Please add "and asphalt pavement" at the end of the first sentence. Please add "and volatilization criteria" at the end of the second sentence.

20. Page 11-3 Table 11-2 Location Specific ARARs and TBCs

Please add CGS §§22a-359 to 363 to this table as Applicable. These statutes concern regulation of dredging and erection of structures and placement of fill in tidal, coastal or navigable waters. For the Navy's convenience, a complete list of State ARARs is attached.

21. Pages 11-4 to 11-5 Table 11-3 Action Specific ARARs and TBCs

Please delete "Potentially" from the "Status" column throughout this table.

Please add the State's Water Quality Standards (CGS §22a-426) to this table as an Applicable requirement.

22. Page G-1 Glossary- "Hot Spots"

Please replace "These" with "Those".

23. Page R-1 References

In the reference for Atlantic, May 1993, please add "Atlantic Environmental Services, Inc." at the end of the underlined title.

In the reference to the State's Water Quality Standards (CTDEP, 1992) please refer to the most recently updated version. The most recent version of the Surface Water Quality Standards became effective April 8, 1997, while the most recent version of the Ground Water Quality Standards became effective April 12, 1996.

In the reference to the Remediation Standard Regulations, please refer to the January 1996 version, which is the one which was officially adopted as a Regulation.

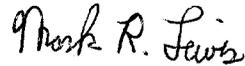
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24. Page R-3 References

Please give full citations for the two US Geological Survey maps. For the Navy's convenience, bibliographic information for these two maps follows: 1) "*Surficial Geology of the Uncasville Quadrangle*", US Geological Survey Geologic Quadrangle Map GQ-138, by Richard Goldsmith, 1960. 2) "*Bedrock Geology of the Uncasville Quadrangle*", US Geological Survey Geologic Quadrangle Map GQ-576, by Richard Goldsmith, 1967.

If you have any questions regarding this letter, please contact me at (860) 424-3768.

Sincerely,



Mark R. Lewis
Senior Environmental Analyst
Federal Remediation Program
Permitting, Enforcement & Remediation Division
Bureau of Water Management

Attachment (ARARs Table)

cc: Kimberlee Keckler, US EPA New England, Federal Facilities Section
Richard Conant, NSBNL Environmental Department
Jean- Luc Glorieux, P.E., Brown and Root Environmental

**Naval Submarine Base New London
Defense Reutilization and Marketing Office
List of State Applicable or Relevant and Appropriate Requirements**

Action Specific ARARs				
Requirement	Citation	Status	Synopsis of Requirement	Action to be Taken to Attain ARAR
Hazardous Waste Management: Generator & Handler Requirements- General Standards, Listing & Identification	RCSA §§22a-449(c)100-101	Applicable	These regulations establish standards for listing and identification of hazardous waste. The standards of 40 CFR §§260-261 are incorporated by reference. Chromium is not exempted from listing as a hazardous waste.	Hazardous waste determinations will be performed for any excavated wastes and the wastes will be managed in accordance with requirements of these regulations, if necessary.
Hazardous Waste Management: Generator Standards	RCSA §22a-449(c)102	Applicable	This regulation establishes standards for various classes of generators. The standards of 40 CFR §262 are incorporated by reference. Storage requirements given at 40 CFR §265.15 are also included.	Any hazardous waste generated through excavation or other activities will be managed in accordance with the substantive requirements of these regulations.
Hazardous Waste Management: TSDF Standards	RCSA §22a-449(c)104	Applicable	This regulation establishes standards for treatment, storage, and disposal of hazardous waste, and establishes standards for closure, post closure, and ground water monitoring. The standards of 40 CFR §264 are incorporated by reference. Underground injection of hazardous wastes, and placement of free liquids in landfills are prohibited.	Any hazardous waste which is treated, stored or disposed of on this site as part of the remedy will be managed in accordance with the requirements of this regulation. The remedy will comply with the closure requirements of this regulation. A cap which complies with the requirements of RCRA subtitle C will be required. Ground water monitoring will be included as part of the remedy.
Hazardous Waste Management: Interim Status Facilities and Ground water Monitoring Requirements, Closure and Post Closure Requirements	RCSA §22a-449(c)105	Applicable	This regulation establishes interim status standards for treatment, storage, and disposal of hazardous waste, and establishes standards for closure, post closure, and ground water monitoring. The standards of 40 CFR §265 are incorporated by reference. The Commissioner may require ground water monitoring based on site specific considerations.	The proposed remedy will comply with the closure requirements of this regulation. A cap which complies with the requirements of RCRA subtitle C will be required. Ground water monitoring will be included as part of this remedial action.

**Naval Submarine Base New London
Defense Reutilization and Marketing Office
List of State Applicable or Relevant and Appropriate Requirements**

Action Specific ARARs				
Requirement	Citation	Status	Synopsis of Requirement	Action to be Taken to Attain ARAR
Hazardous Waste Management: Land Disposal Restrictions	RCSA §22a-449(c)108	Applicable	This regulation incorporates by reference the Federal Land Disposal Restrictions given at 40 CFR §268.	The requirements of the Land Disposal Restriction will be complied with if any hazardous waste is disposed of on this site as part of the remedy.
Hazardous Waste Management: Permit Requirements	RCSA §22a-449(c)110	Applicable	This regulation incorporates by reference the Federal hazardous waste permitting requirements given at 40 CFR §§270 & 124.	If activities which constitute treatment, storage or disposal of hazardous waste onsite are undertaken as part of the remedy, the substantive requirements of these regulations will be met.
Solid Waste Management	RCSA §§22a-209-1 to 15	Relevant and Appropriate	These regulations establish operating and closure standards for solid waste disposal areas including closure, post-closure, and groundwater monitoring requirements. Note that the definition of Solid Waste is given in CGS §22a-207.	Those portions of the regulations that are more stringent than Federal RCRA Subtitle D regulations will be complied with.
Solid Waste Management	CGS 22a-250	Applicable	Littering and dumping are prohibited.	All wastes generated during the remedial action will be handled in accordance with the requirements of this statute.
Disposition of PCBs	CGS §22a-467	Applicable	This statute requires that PCBs be disposed under a permit issued by the Commissioner. PCBs may also be disposed of under a written approval of the Commissioner in a manner which results in the destruction of the PCB or in a manner not inconsistent with the Requirements of the Toxic Substances Control Act (TSCA), listed at 40CFR §761.	All PCB-contaminated materials will be handled in accordance with the substantive requirements of this statute.
Water Quality Standards	CGS §22a-426	Applicable	Connecticut's Water Quality Standards were adopted under this statute. They establish specific numeric criteria, designated uses, and anti degradation policies for groundwater and surface water.	The remedial action selected will comply with the requirement that discharges from the landfill not cause any further degradation of ground water quality.

**Naval Submarine Base New London
Goss Cove Landfill
List of State Applicable or Relevant and Appropriate Requirements**

Action Specific ARARs				
Requirement	Citation	Status	Synopsis of Requirement	Action to be Taken to Attain ARAR
Control of Noise Regulations	RCSA §§22a-69-1 to 69-7.4	Applicable	These regulations establish allowable noise levels.	Noise levels from construction activities are exempt from these requirements. The remedial action shall be designed and constructed so that any noise emitted after construction will meet the substantive requirements of these regulations.
Regulations for the Well Drilling Industry	RCSA §25-128-33 to 64	Applicable	These regulations apply to any new water supply or withdrawal wells. Non- water supply wells must be constructed so they are not a source or cause of ground water contamination. Procedures for abandonment of wells apply to both water supply and non- water supply wells.	If wells are used for construction dewatering, they will be installed in accordance with the substantive requirements of this regulation. Any well abandonments will be conducted in accordance with the substantive requirements of this regulation.
Registration and Permitting of Wells and Well Drillers	CGS §25-126 thru 131	Applicable	These regulations require well drillers to be registered and requires permits and fees for each water supply well drilled. Separate registrations apply to water supply and non- water supply wells. Permits are not required for non water supply wells. However, the driller must file a completion report for both water supply and non- water supply wells.	All monitoring wells or other wells will be installed by registered drillers and all substantive requirements of this regulation will be met.
CT Guidelines for Soil Erosion and Sediment Control	CT Council on Soil and Water Conservation	Applicable	The guidelines provide technical and administrative guidance for the development, adoption and implementation of erosion and sediment control program.	These guidelines will be incorporated into any remedial designs for this site.

**Naval Submarine Base New London
Goss Cove Landfill
List of State Applicable or Relevant and Appropriate Requirements**

Location-specific ARARs				
Requirement	Citation	Status, Relevant Alternatives	Synopsis of Requirement	Action to be Taken to Attain ARAR
Regulation of Dredging and Erection of Structures and Placement of Fill in Tidal, Coastal, or Navigable Waters	CGS § 22a-359 through 363	Applicable	These statutes control activities in navigable waters of the state waterward of the high tide line.	There are no proposed remedial activities in any areas waterward of the high tide line at this site; however, if such activities take place, the substantive requirements of these statutes will be met.
Coastal Management Act	CGS § 22a-90 to 112	Applicable	This statute requires persons conducting activities within the coastal zone to submit a coastal site plan to the municipality. The municipality uses the coastal site plan to determine whether the proposed activity poses unacceptable impact on coastal resources and future water dependant activities. The municipality may require the applicant to take all reasonable measures to mitigate such adverse impacts.	A coastal site plan will be submitted for review and the remedy will comply with any substantive requirements.

**Naval Submarine Base New London
Goss Cove Landfill
List of State Applicable or Relevant and Appropriate Requirements**

Chemical Specific ARARs				
Requirement	Citation	Status, Relevant Alternatives	Synopsis of Requirement	Action to be Taken to Attain ARAR
Remediation Standard Regulations	RCSA §22a-133k-1 to k-3 (Established pursuant to CGS §22a-133k)	Applicable	These regulations were adopted on January 30, 1996, under the statutory authority provided by CGS §22a-133k. They provide specific numeric cleanup criteria for a wide variety of contaminants in soil, ground water, and soil vapor. The regulations include a procedure for establishing criteria where none exist for a particular pollutant, and for establishing alternative criteria where those specified in the regulations are not appropriate.	The direct exposure and pollutant mobility criteria will not apply since an engineered control (cap) which complies with the substantive requirements of the regulations has been installed, and the remaining portions of the site have been paved. This interim remedy is not designed to address ground water contamination. However, ground water monitoring will be conducted to determine whether any further remedial action is necessary to address ground water contamination. The final remedy will comply with the requirements regarding ground water, including the surface water protection and volatilization criteria.