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Christine Williams, Remedial Project Manager
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November 13, 1995

J.O. No. 04291.0810
T40-025

Contract No. N62472-92-D-1296, CTO No. 0040
Navy's Response to EPA Comments
Final Engineering Evaluation/Cost Analysis (EE/CA) - Study Area 4
Naval Construction Battalion Center

Enclosed please find Navy's response to the Environmental Protection Agency's (EPA) comments dated August 10, 1995 for the Final EE/CA for Study Area 4. The comments which were prepared by Stone & Webster will be incorporated into the Final Non-Time-Critical Action Memorandum and the Responsiveness Summary, as applicable. The numbered responses correspond to the number of the EPA comment.

As you requested, an advanced copy of the revised Applicable or Relevant and Appropriate Requirement (ARAR) tables has been included for review before issuing the Final Action Memorandum. In addition, the proposed cleanup levels for Study Area 4 have been included in this Response to Comments at your request.

Please feel free to contact me at (617) 589-8323 if you have any questions.

Sincerely,


Lisa O. Brandon, P.E.
CTO Manager

Enclosure

cc: POTis - Navy (enc)
LFayan - Navy (enc)

CWHoulik - EA (enc)
NLanney - EA (enc)

RGottlieb - RIDEM (enc)
TPrior - USF&W (enc)

**Proposed Responses To EPA Comments, Final EE/CA Study Area 4
November 13, 1995**

1. From the telephone conversation on November 3, 1995 between Stone & Webster and the EPA, it was concluded that Stone & Webster will not change the risk assessment as it appears in the EE/CA. This conclusion was reached after consideration that the proposed removal action would not be altered upon revision of the risk assessment, and the contaminants of concern would remain the same. In addition, the EPA guidance document using the hazard quotient of 0.1 vs 1.0 was not released until August, 1995. The EE/CA was issued July 20, 1995.
2. Comment will be incorporated.
3. The comment will be incorporated into the Non-Time-Critical Action Memorandum (Action Memorandum) as the proposed action has been called "removal" not "remedial". The Study Area Screening Evaluation (SASE) was included in the preparation of both the EE/CA and the Action Memorandum.
4. Examples of other potential contaminants at Study Area 4 will be included in this section of the Action Memorandum.
5. The Navy does not have plans to pave the existing road network at the base, therefore has not considered using the resulting asphalt batching materials on the base.

The Navy is performing a removal action, and it is the Navy's understanding that if contaminants are reduced to below action levels, five year reviews are not required. No change will be incorporated into the Action Memorandum unless information is presented which states that this understanding is incorrect.

Previous EPA comment #13 dated June 30, 1995 will be incorporated into the Action Memorandum.

6. Both the EE/CA and the Action Memorandum included Figure 2-1 as a Site Plan of Study Area 4. This figure shows both the trench location as well as the locations of the two areas of asphaltic material within the trench. Figures 2-2 through 2-7 show more specifically the sampling locations and locations of contaminants of concern within the portion of the trench containing the asphaltic material. No further graphics will be included in the Action Memorandum as these figures appear to be sufficient.

7. As this comment is not applicable to the Action Memorandum, the Action Memorandum will not be modified. In the future, Stone & Webster will be consistent in its approach with regards to comparison of the calculated arithmetic mean exposure point concentrations and the geometric means.
8. Comment will be incorporated into the Action Memorandum.
9. Comment will be incorporated into the Action Memorandum.
10. Comment will be incorporated into the Action Memorandum.
11. The statistical values shown in Columns M through S of the table in Appendix E show the intermediate steps involved in the calculation of the 95%UCLs. These columns will be removed from the table as they do not provide any additional information.
12. Comment will be incorporated into Action Memorandum. The tables are enclosed per EPA's request.
13. Table 2-3 has been modified accordingly and has been combined with Table 2-5. This table is enclosed as Table 2-3.
14. All comments on Table 2-4 will be incorporated as can be seen on the enclosed tables.
15. All comments on Table 2-5 will be incorporated as can be seen on the enclosed tables. Please note that the table is now numbered as Table 2-3.
16. All comments on Table 2-6 will be incorporated as can be seen on the enclosed tables. Please note that this table has been renumbered as Table 2-5.

Also, as requested by Christine Williams on November 3, 1995, the following cleanup levels are proposed for Study Area 4:

PCB:	< 10 ppm
TPH:	< 500 ppm

These cleanup levels appear as above in the Draft Non-Time-Critical Removal Action for Study Area 4, dated August 17, 1995, with the exception of beryllium. In addition, they will be included in the Action Memorandum as discussed in the phone conversation on November 3, 1995.

TABLE 2-3
CHEMICAL-SPECIFIC ARARs AND TBCs
STUDY AREA 4 - CED ASPHALT DISPOSAL AREA

MEDIA	REQUIREMENT	STATUS	SYNOPSIS	ACTION TO MEET ARAR
<u>FEDERAL</u> Soils/Surfaces --	Toxicity Characteristic (40 CFR 261.24)	Relevant & Appropriate	Establishes maximum concentrations of contaminants for the toxicity characteristic using the test methods described in 40 CFR 261 Appendix II.	Applicable where wastes produced as a byproduct of a remedial or removal action require handling as a hazardous waste on the basis of the Toxicity Characteristic Leaching Procedure (TCLP) analysis.
	Land Disposal Restrictions (LDRs), (40 CFR 268)	To be determined	Establishes maximum concentrations of contaminants on the basis of which hazardous wastes are restricted from land disposal.	Waste materials will be evaluated to determine whether the waste is hazardous. If so, the materials will be treated in accordance with LDRs prior to disposal.

TABLE 2-4
CHEMICAL-SPECIFIC ARARs AND TBCs

STUDY AREA 4 - CED ASPHALT DISPOSAL AREA

MEDIA	REQUIREMENT	STATUS	SYNOPSIS	ACTION TO MEET ARAR
<u>FEDERAL</u>				
Endangered Species --	Endangered Species (16 USC 1531) Protection of Endangered Species	Applicable	Remedial actions may not jeopardize the continued existence of endangered or threatened species, or adversely modify or destroy their critical habitats.	Grasshopper sparrows, upland sandpipers and the least tern have been identified in the general area of the Asphalt Disposal Area, although not specifically at Study Area 4. If any of these species are identified at the Study Area, appropriate measures will be taken during construction to ensure that the removal action does not adversely affect the species or its habitat. In addition, the restored Study Area may provide habitat for these species.
Cultural Resources --	National Historic Preservation Act of 1966 (16 USC 470, et seq.) Protection of Historic Lands and Structures; Archaeological and Historic Preservation Act of 1974 (132 CFR 229 & 229.4, 43 CFR 7 & 7.4); Historic Sites, Buildings and Antiquities Act.	Applicable	Several statutes which govern the preservation at historic, scientific and archaeological sites and resources. Includes action to recover and preserve artifacts, preserve historic properties and minimize harm to National Historic Landmarks.	Removal action must be coordinated with preservation agencies and societies to minimize loss of significant scientific, prehistoric, historic or archaeological data.

**TABLE 2-5
FEDERAL AND STATE ACTION-SPECIFIC ARARs AND TBCs
STUDY AREA 4 - CED ASPHALT DISPOSAL AREA**

MEDIA	REQUIREMENT	STATUS	SYNOPSIS	ACTION TO MEET ARAR
<u>FEDERAL</u> On-site/ Off-site Treatment/ Disposal	Resource Conservation and Recovery Act (RCRA) (40 CFR 262) Generator Requirements for Manifesting Waste for Off-Site Disposal	Relevant & Appropriate	Standards for manifesting, marking and recording off-site hazardous waste shipments for treatment/disposal.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.
	RCRA (40 CFR 263) Transporter Requirements for Off-Site Disposal	Relevant & Appropriate	Standards for transporters of hazardous waste materials.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.
	RCRA (40 CFR 264.10-264.18) Subpart B - General Facility Standards	Relevant & Appropriate	General requirements regarding waste analysis, security, training, inspections, and location applicable to a facility which stores, treats or disposes of hazardous wastes (a TSDF facility).	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.
	RCRA (40 CFR 264.30-264.37) Subpart C - Preparedness and Prevention	Relevant & Appropriate	Requirements applicable to the design and operation, equipment, and communications associated with a TSDF facility, and to arrangements with local response departments.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.
	RCRA (40 CFR 264.50-264.56) Subpart D - Contingency Plan and Emergency Procedures	Relevant & Appropriate	Emergency planning procedures applicable to a TSDF facility.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.

TABLE 2-5 (continued)
FEDERAL AND STATE ACTION-SPECIFIC ARARs AND TBCs
STUDY AREA 4 - CED ASPHALT DISPOSAL AREA

MEDIA	REQUIREMENT	STATUS	SYNOPSIS	ACTION TO MEET ARAR
On-site/ Off-site Treatment/ Disposal (cont.)	RCRA (40 CFR 264) Subpart G Closure/Post Closure Requirements	Relevant & Appropriate	Establishes requirements for the closure and long-term management of a hazardous waste disposal facility.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.
	RCRA (40 CFR 264) Subpart I Use and Management of Containers	Relevant & Appropriate	Outlines use and management standards applicable to owners and operators of all hazardous waste facilities that store containers of hazardous waste.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.
	RCRA (40 CFR 264.600- 264.999) Subpart X Miscellaneous Units	Relevant & Appropriate	Sets environmental performance standards, monitoring requirements and post-closure care requirements applicable to miscellaneous units (not otherwise defined in the RCRA regulations) used to treat, store or dispose of hazardous waste.	The substantive provisions of this regulation will be met if the removal action addresses a waste which is a listed or characteristic waste under RCRA and which constitutes current treatment, storage, or disposal as defined by RCRA.

TABLE 2-5 (continued)
FEDERAL AND STATE ACTION-SPECIFIC ARARs AND TBCs
STUDY AREA 4 - CED ASPHALT DISPOSAL AREA

MEDIA	REQUIREMENT	STATUS	SYNOPSIS	ACTION TO MEET ARAR
STATE On-site/ Off-site Disposal/ Treatment	RI Hazardous Waste Management Act of 1978 (RIGL 23-19.1 et seq.) (cont.)	Relevant & Appropriate	Rules and regulations for the investigation and remediation of releases of hazardous materials.	The design and operation of the removal action will comply with these regulations.
	<ul style="list-style-type: none"> Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Site Remediation Regulations) 	Relevant & Appropriate	Rules and regulations for hazardous waste generation, transportation, treatment, storage and disposal. They incorporate by reference the relevant and appropriate federal RCRA requirements set forth above.	The action will meet the substantive requirements of these regulations.
	RI Hazardous Substance Community Right to Know Act (RIGL, Title 23, Chapter 24.4)	To be determined	Rules and regulations for the public's right-to-know concerning hazardous waste storage and transportation.	The action will meet the substantive requirements of these regulations.

TABLE 2-5 (continued)
FEDERAL AND STATE ACTION-SPECIFIC ARARs AND TBCs
STUDY AREA 4 - CED ASPHALT DISPOSAL AREA

MEDIA	REQUIREMENT	STATUS	SYNOPSIS	ACTION TO MEET ARAR
RI Clean Air Act (RIGL, Title 23, Chapter 23) General Air Quality and Air Emissions Requirements, RI Air Pollution Control Regulations, RI Dept of Health, Div of Air Pollution Control, eff. 8/2/67, most recently amended 5/20/91	<ul style="list-style-type: none"> • Regulation No. 1 - Visible Emissions 	Applicable	No air contaminant emissions will be allowed for more than 3 minutes in any one hour which are greater than or equal to 20% opacity.	The removal action will meet emission levels in these regulations to the extent practicable.
	<ul style="list-style-type: none"> • Regulation No. 5 - Fugitive Dust 	Applicable	Requires that reasonable precautions be taken to prevent particulate matter from becoming airborne.	The removal action will use good industrial practices to prevent particulate matter from becoming airborne.
	<ul style="list-style-type: none"> • Regulation No. 7 - Emissions Detrimental to Person or Property 	Applicable	Prohibits emissions of contaminants which may be injurious to human, plant or animal life or which unreasonably interferes with the enjoyment of life.	All emissions will meet this requirement to the extent practicable.
	<ul style="list-style-type: none"> • Regulation No. 17 - Odors 	Applicable	Prohibits the release of objectionable odors across property lines.	No removal action will emit objectionable odors beyond property lines to the extent practicable.