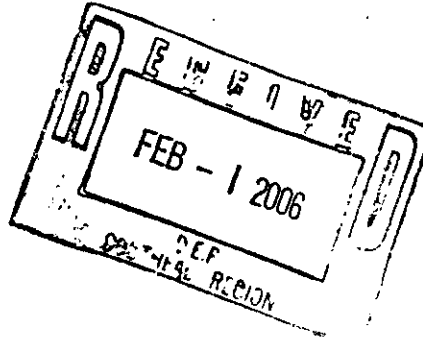


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
EPA NEW ENGLAND

Memorandum

**Date:** January 31, 2006  
**Subject:** Aerovox EE/CA  
**From:** Cynthia E. Catri  
Senior Enforcement Counsel  
**To:** Scott Sayers, MADEP  
Joe Coyne, MADEP  
Gary Morin ACOE  
Paul L'Heureux, ACOE  
Mark Anderson, ACOE



Attached are the updated pages of the Aerovox EE/CA that should have been inserted into your 8/27/98 copy. These pages consist of the following sections:

Table of Contents (3 pages)

3. Potentially Applicable or Relevant and Appropriate Requirements (ARARs) Pages 3-1 to 3-2.

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Table 14a Potential Action-Specific ARARs Pages 1 through 6

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cc: Dave Dickerson (w/o attachments)

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### **3. Potentially Applicable or Relevant and Appropriate Requirements (ARARs)**

This section presents a list of potential ARARs under federal and Massachusetts environmental laws. The purpose of this list is to present each potential ARAR identified and define its applicability to the removal action for this facility.

In accordance with the NCP, removal actions taken pursuant to Section 106 of CERCLA must, to the extent practicable considering the exigencies of the situation, attain ARARs under federal environmental or state environmental or facility siting laws [40 CFR 300.415(j)]. ARARs are state and federal human health and environmental regulations and statutes generally used to evaluate the appropriate extent of site cleanup, formulate and scope removal action alternatives, and govern the implementation and operation of a selected removal action alternative.

For a regulation or statute to be considered an ARAR, it must be substantive and not administrative, formally promulgated by the effective date of the decision document by a federal or state agency, and of general applicability and legally enforceable. If they are legally enforceable statewide, state requirements may also be considered ARARs. However, only state requirements that are promulgated, more stringent than federal requirements, and identified by the state in a timely manner may be considered ARARs [40 CFR 300.400(g)(4)].

The NCP defines two types of ARARs:

- **Applicable Requirements:** Cleanup standards, standards of control and other substantive requirements, criteria, or limitations promulgated under federal or state environmental laws that specifically address a hazardous substance, pollutant, contaminant, response action, location, or other circumstance found at the CERCLA site (40 CFR 300.5). These include federal requirements that are directly applicable as well as those incorporated by a federally authorized state program. Only those state standards that are identified by the state in a timely manner and that are more stringent than the federal requirements may be applicable.
- **Relevant and Appropriate Requirements:** Promulgated cleanup standards, standards of control, and other substantive requirements, criteria, or limitations that, while not applicable to a hazardous substance, pollutant, contaminant, response action, or other circumstance at the CERCLA site, address problems or situations sufficiently similar to those encountered at the site so that their use is well suited to the particular site (*ibid*). To fall within this category, the requirements must be both relevant and appropriate to the site-specific circumstances. Factors considered in the determination of the relevance and appropriateness of a requirement are presented in 40 CFR 300.400(g)(2).

In addition, to applicable or relevant and appropriate requirements, other advisories, criteria, or guidance may be considered, as appropriate. The "to be considered" (TBC) category consists of advisories, criteria, or guidance that have been developed by the USEPA, other federal agencies, or states that may be useful in developing CERCLA remedies [40 CFR 300.400(g)(3)].

Removal actions under Section 106 of CERCLA must attain ARARs only to the extent practicable considering the exigencies of the situation [40 CFR 300.415(j)]. In determining whether compliance with an ARAR is practicable, the lead agency may consider all appropriate factors including: 1) the urgency of the situation; and 2) the scope of the removal action [40 CFR 300.415(j)(1) and (2)]. Even if compliance with an ARAR is deemed practicable based on the consideration of the above factors, compliance may nevertheless be waived under any of the circumstances for which CERCLA allows a waiver for remedial actions [see Section 121(d)(4) of CERCLA; 40 CFR 300.430(f)(1)(ii)(C)].

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The identified potential ARARs that pertain to the removal action at this facility are listed in Tables 13, 14a, and 14b:

- Table 13 summarizes the potential chemical-specific ARARs. Chemical-Specific ARARs are health or risk-based numeric values or methodologies that establish the acceptable amount or concentration of a chemical that may be found in or discharged to the ambient environment. These ARARs govern the extent of site remediation by providing either actual cleanup concentrations or the basis for the calculation of such concentrations. These ARARs may also be used to indicate the acceptable concentrations of discharge, in determining treatment and disposal requirements, and to assess the effectiveness of future remedial alternatives;
- Table 14a summarizes the potential action-specific ARARs. Action-Specific ARARs are technology- or activity-based requirements or limitations on actions involving the management of hazardous substances, pollutants, or contaminants. These ARARs often set controls or restrictions on the design, implementation, and/or performance of the removal actions. These ARARs also provide a basis for assessing the feasibility and effectiveness of various proposed alternatives by specifying performance requirements and limitations, actions or technologies, and/or specific discharge or residual concentrations; and
- Table 14b summarizes the potential location-specific ARARs. Location-specific ARARs are restrictions placed on the concentration of hazardous substances or the conduct of activities solely because they occur in specific locations.

These tables identify each ARAR, outline its requirements, define its applicability or appropriateness, and include how the ARAR will be attained by the removal action at the facility. ARARs are state and federal human health and environmental regulations and statutes and are only identified for work activities that occur on-site. Occupational safety and health protection standards under the Occupational Safety and Health Act (OSHA) were not considered to be environmental standards; however, applicable OSHA standards, as well as other applicable non-environmental regulations, will be met during implementation of the removal action.

Finally, the Commonwealth has noted that the remedy calls for leaving material behind which exceeds the State's upper concentration limit of 100 ppm PCBs in soil. As a result, the Massachusetts Contingency Plan, Class A-4 Response Action Outcome requires an engineered barrier as cover for those soils. An engineered barrier in accordance with the Massachusetts Hazardous Waste Management Closure Requirements, identified in ARARs Table 14a, will be part of the removal action.

Table 13  
 Aerovox, Inc. Facility  
 New Bedford, Massachusetts  
 Engineering Evaluation/Cost Analysis (EE/CA)

Potential Chemical-Specific ARARs

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Consideration in the Removal Process/Action for Attainment
Massachusetts Contingency Plan	310 CMR 40.0000, Subpart I: 310 CMR 40.0974(2) - Table 1, MCP Method 1: Ground-Water Standards 310 CMR 40.0975(6)(c) - Table 4, MCP Method 1: Soil Category S-3 Standards	Soil and ground-water standards for Method 1 only.	MCP Method 1, Category GW-3 standards are appropriate for this site because ground water in the vicinity of the building is not used as a current source of drinking water and is not a potential future source. For soils, MCP Method 1, Category S-3/GW-3 standards are appropriate because the soil at the facility is essentially inaccessible (i.e., covered with pavement or concrete), children are not present at the facility, and the frequency and intensity of exposure to soil by adults is low.	Applicable to use for screening the analytical data associated with this site to identify chemicals of interest.
USEPA's Integrated Risk Information System (IRIS)	To Be Considered Guidance	Cancer Slope Factors (CSFs)	CSFs are "to be considered" guidance values used to evaluate the potential carcinogenic hazard caused by exposure to certain contaminants from the site.	Demolition and capping of the facility will minimize exposure to potential receptors and provide protection of human health.
USEPA's Integrated Risk Information System (IRIS)	To Be Considered Guidance	Reference Doses (RfDs)	RfDs are "to be considered" guidance values used to evaluate the potential noncarcinogenic hazard caused by exposure to contaminants from the site.	Demolition and capping of the facility will minimize exposure to potential receptors and provide protection of human health.
PCB Cancer Dose -- Response Assessment and Application for Environmental Mixtures (EPA/600/P-96/801F, September 1996)	To Be Considered Guidance	Guidance for USEPA's reassessment of the carcinogenicity of PCBs.	Information presented in this USEPA document is "to be considered" in assessing potential carcinogenic risks associated with potential exposure to PCBs. This guidance document includes revised slope factors for PCBs based on the potential pathways of exposure.	Demolition and capping of the facility will minimize exposure to potential receptors and provide protection of human health.

**Table 14a**  
**Aerovox, Inc. Facility**  
**New Bedford, Massachusetts**  
**Engineering Evaluation/Cost Analysis (EE/CA)**

**Potential Action-Specific ARARs**

<b>Regulation</b>	<b>Citation</b>	<b>Criterion/Standard</b>	<b>Applicability/Appropriateness</b>	<b>Consideration in the Removal Process/Action for Attainment</b>
National Emission Standards for Hazardous Air Pollutants (NESHAP)	40 CFR 61	Provides regulations for emissions of particular air pollutants from specific sources.	Applicable to the list of pollutants identified in 40 CFR 61.01, which includes asbestos, and applies to the owner or operator of any stationary source for which a standard is prescribed in 40 CFR 61. The majority of 40 CFR Part 61 pertains to air emissions from a specific facility operation (i.e., not building demolition); however, Subpart M of 40 CFR 61 is applicable to the removal action, as detailed below.	Subpart M of 40 CFR 61 will be followed, as appropriate, based on the results the asbestos survey to be conducted prior to building demolition.
40 CFR Subpart M - National Emission Standard for Asbestos	40 CFR 61.145	Provides standards for demolition of asbestos-containing materials.	Based on the presence of vinyl floor tile, pipe insulation materials, and boiler insulation materials within the building that may potentially contain asbestos, an asbestos survey will be conducted to determine if abatement is required prior to building demolition. Depending upon the results of that survey, this regulation (40 CFR 61.145 - Standard for Demolition and Renovation) may be applicable.	This regulation will be followed, as appropriate, based on the results the asbestos survey to be conducted prior to building demolition.
Massachusetts Air Pollution Control Regulations	310 CMR 7.09 and 7.15	Building demolition activities shall not cause or contribute to a condition of air pollution.	Applicable to building demolition activities.	Appropriate measures will be implemented during the building demolition activities to prevent excessive emissions of particulate matter, as required by this regulation. Potential mitigative measures to be implemented, as well as the associated air and dust monitoring activities, will be detailed in special conditions and plans/procedures to be developed during the design phase. Additionally, an asbestos survey will be conducted to determine if abatement measures are required prior to the building demolition.



**Table 14a**  
**Aerovox, Inc. Facility**  
**New Bedford, Massachusetts**  
**Engineering Evaluation/Cost Analysis (EE/CA)**

**Potential Action-Specific ARARs**

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Completion in the Remedial Process/Timing for Action/Action
Ambient Air Quality Standards for the Commonwealth of Massachusetts	310 CMR 6.04	Provides primary and secondary ambient air quality standards, including standards for particulate matter.	Applicable to the generation of particular matter during building demolition activities.	An air monitoring plan will be developed and implemented as part of the removal action, and appropriate dust suppression methods will be conducted (as necessary) based on the air monitoring results.
MDEP Recommended Threshold Effect Exposure Limits (TELEs) and Allowable Ambient Limits (AALs)	To Be Considered Guidance	TEL and AAL values are exposure concentrations for air contaminants.	This guidance will be considered in evaluation of air emissions against TEL and AAL values.	These values will be considered in the development of an air monitoring plan that will be implemented as part of the removal action.
MDEP Noise Regulation	310 CMR 7.10	No person owning, leasing, or controlling a source of sound shall willfully, negligently, or through failure to provide necessary equipment, service, or maintenance or to take necessary precautions cause, suffer, allow, or permit unnecessary emissions from said source of sound that may cause noise.	Applicable to construction and demolition equipment which characteristically emit sound but which may be fitted and accommodated with equipment to suppress sound or may be operated in a manner so as to suppress sound.	Building demolition activities will be conducted to meet this regulation by implementing appropriate measures during building demolition activities to minimize unnecessary noise, as required by 310 CMR 7.10. Monitoring for noise will be conducted in accordance with the applicable requirements of the MDEP of Air Quality Control (DAQC)'s Policy 90-001, as detailed below.
MDEP Division of Air Quality Control (DAQC) Policy - Allowable Sound Emissions, Policy 90-001, dated February 1, 1990	To Be Considered Guidance	This policy sets-forth criteria for determining if a source of sound is in violation of the Department's noise regulation which applies to building demolition activities (i.e., 310 CMR 7.10, identified above). The DAQC policy criteria are to be measured both at the property line and the nearest inhabited residence.	"To be considered guidance" that will be considered for construction and demolition equipment which characteristically emit sound, but which may be fitted and accommodated with equipment to suppress sound or may be operated in a manner so as to suppress sound.	The criteria identified in DAQC Policy 90-001 will be measured at the property line during the building demolition activities (there are no inhabited residences in close proximity to the Aerovox facility).

**Table 14a**  
**Aerovox, Inc. Facility**  
**New Bedford, Massachusetts**  
**Engineering Evaluation/Cost Analysis (EE/CA)**

**Potential Action-Specific ARARs**

<b>Regulation</b>	<b>Citation</b>	<b>Criterion/Standard</b>	<b>Applicability/Aprerequisites</b>	<b>Consideration in the Removal Process/Action/Requirement</b>
TSCA Regulations	40 CFR 761.60	PCB disposal requirements.	Applicable to the disposal of certain PCB containing materials, including PCB liquids and PCB articles which includes leaking PCB small capacitors.	PCB contaminated waste materials will be disposed of in accordance with this citation, as required.
TSCA Regulations	40 CFR 761.61(a)(5)	Requirements for off-site disposal of bulk PCB remediation wastes, porous and non-porous PCB remediation waste, and liquid PCB remediation waste.	Applicable to the off-site disposal of PCB remediation wastes during implementation of the removal action.	PCB remediation wastes will be decontaminated or disposed of in accordance with the substantive requirements of this section.
TSCA Regulations	40 CFR 761.61(c)	Risk-based clean-up approval requirements for PCB remediation wastes	Applicable to sampling, clean-up, or disposal of PCB remediation waste in a manner other than the self-implementing provisions of 40 CFR 761.61(a) or performance based provisions of 40 CFR 761.61(b), or storage of PCB remediation waste in a manner other than 40 CFR 761.65.	The EPA Regional Administrator must determine that the removal action will not pose an unreasonable risk of injury to health or the environment.
TSCA Regulations	40 CFR 761.62	Disposal of PCB bulk product waste requirements.	Applicable to the disposal of PCB bulk product waste resulting from implementation of the removal action, including fluorescent light ballasts containing PCBs in the potting material.	Disposal of PCB bulk product waste will be conducted in accordance with this citation. Fluorescent light ballasts will be disposed of as PCB waste or decontaminated under 40 CFR 761.79, as required.

Table 14a  
 Aerovox, Inc. Facility  
 New Bedford, Massachusetts  
 Engineering Evaluation/Cost Analysis (EE/CA)

Potential Action-Specific ARARs

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Consideration in the Remedial Process/Action for Attainment
TSCA Regulations	40 CFR 761.65(a) and (c)(9)	Storage limitations for disposal.	Applicable to the storage for disposal of PCBs at concentrations of 50 ppm or greater and PCB items with PCB concentrations of 50 ppm or greater.	Any PCB waste generated from the removal action work activities will be disposed of within one year and stored in facilities described in 40 CFR 761.65.  Liquid PCB remediation wastes will be stored in accordance with 40 CFR 761.61(c).  Bulk PCB remediation wastes or bulk PCB product may be stored at the site for 180 days subject to conditions specified in 40 CFR 761.65(c)(9).
TSCA Regulations	40 CFR 761.79	Decontamination standards and procedures for removing PCBs which are regulated for disposal, from water, organic liquids, non-porous surfaces (including scrap metal from disassembled electrical equipment), concrete, and non-porous surfaces covered with a porous surface such as paint or coating on metal.	Applicable decontamination standards and procedures for removing PCBs from materials.	Decontamination procedures will be followed during work activities, as required.
TSCA PCB Spill Cleanup Policy	40 CFR 761 Subpart G, Sections 761.120 through 135	This policy establishes USEPA criteria used to determine the adequacy of the cleanup of spills resulting from the release of materials containing PCBs at concentrations of 50 ppm or greater.	The PCB Spill Cleanup Policy is "to be considered" to address PCB spills or leaks (if any) during implementation of the removal action.	The requirements of this policy will be considered, as appropriate, when determining the appropriate method(s) to address PCB spills or leaks (if any) that may occur during implementation of the removal action.

**Table 14a**  
**Aerovox, Inc. Facility**  
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**Engineering Evaluation/Cost Analysis (EE/CA)**

**Potential Action-Specific ARARs**

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Guidance on the Remedial Action Plan
Guidance on Remedial Actions for Superfund Sites with PCB Contamination, OSWER Directive No. 9355.4-01, August 1990	To Be Considered Guidance	This guidance document outlines the remedial investigation/feasibility and selection of remedy process as it specifically applies to the development, evaluation, and selection of remedial actions that address PCB contamination at Superfund sites.	This USEPA guidance document is "to be considered" during the EE/CA and removal action process.	This document will be used, as appropriate, as guidance during the EE/CA and removal action process.
Massachusetts Hazardous Waste Management	310 CMR 30.100	Establishes standards for the identification and listing of hazardous wastes.	Applicable to identifying and listing materials (if any) that are hazardous under Massachusetts regulations.	Materials associated with the removal action that require off-site disposal may be identified and listed (if any) as hazardous wastes.
Massachusetts Hazardous Waste Management Requirements for Generators	310 CMR 30.300	Establishes standards for various classes of generators.	Applicable to the generation of hazardous waste (if any) from removal action work activities.	Work activities will be managed in accordance with substantive requirements of these standards.

**Table 14a**  
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Potential Action-Specific ARARs

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Consideration in the Remedial Action Plan
Massachusetts Hazardous Waste Management Closure and Post-Closure Care	310 CMR 30.633, 30.660-30.669	Requirements for closure and post-closure care of a landfill or cell.	Applicable to the installation of a cap and post-closure activities to be conducted as part of the removal action.	<p>The closure and post-closure care requirements of CMR 30.633 [and the requirements of 40 CFR 761.61(a)(7), whichever are more stringent for the type of cap to be designed/installed] will be implemented to meet these requirements, as appropriate for the type of cap to be constructed. As discussed in Section 5.3, the details of the final cap will be selected during the design phase of the project. Compliance with substantive requirements of these regulations will be achieved through development and implementation of a long-term operations and maintenance (O&amp;M) plan.</p> <p>A long-term ground-water monitoring program will be part of the removal action. That monitoring program will comply with applicable and substantive ground-water protection requirements of 310 CMR 30.660 through 699.</p>

**Table 14b**  
**Aerovox, Inc. Facility**  
**New Bedford, Massachusetts**  
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**Potential Location-Specific ARARs**

Regulation	Citation	Critical Standard	Applicability / Appropriateness	Consideration in the Removal Decision for Attribution
Floodplain Management - Executive Order 11988	40 CFR Appendix A to Part 6	Procedures on floodplain management and wetlands protection.	Applicable due to work activities being conducted in the 100-500 year floodplain and 100 year coastal floodplain (Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 255216-0007B, dated January 5, 1984).	The removal action selected must be the best practical acceptable alternative. Remedial activities will be implemented to minimize potential harm to the floodplain and will observe floodplain protective measures.
Wetlands Protection - Executive Order 11990	40 CFR Appendix A to Part 6	Wetlands protection policy.	As identified in Section 6 - Requirements, if there is no wetlands impact identified, the action may proceed without further consideration.	The substantive portions of this regulation apply to work performed in a wetland, if wetlands are identified.
Coastal Zone Management	16 USC Parts 1452 et seq. 301 CMR 21.00	Procedures and requirements for the protection of the coastal zone.	Applicable - entire site is located in a coastal zone management area.	Actions must be consistent with State approved coastal zone management programs, to the maximum extent possible.
Waterways	301 CMR 9.00	Protection of waterways.	This regulation will be applicable if any portion of the site is within a filled tideland.	Remedial activities within a filled tideland (if any) will be consistent with substantive requirements of this regulation, as appropriate.
Wetlands Protection	310 CMR 10.00	Requirements for the protection of wetlands and other natural resource areas.	The site is located within the buffer zone of several coastal resources.	See particular resource areas listed below and actions to be taken within the buffer zones of those areas.
Areas Subject to Protection	310 CMR 10.02	Requirements for conducting activities within the areas subject to protection or Buffer Zone.	Relevant and appropriate to site activities within the Buffer Zone and within 25 feet of a Riverfront Area.	Some site activities will be conducted within the Buffer Zone or areas subject to protection. Remedial activities conducted will be consistent with substantive requirements of this regulation, as appropriate.

Table 14b

*Aerovox, Inc. Facility  
New Bedford, Massachusetts  
Engineering Evaluation/Cost Analysis (EE/CA)*

Potential Location-Specific ARARs

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Consideration in the Removal Process/Action for Attainment
Coastal Wetlands	310 CMR 10.24	Additional general provisions for conducting work activities within coastal resource areas to ensure coastline development is conducted to protect public interests in coastal resources.	These provisions apply to 310 CMR 10.21 through 10.37. The site is within buffer zone of several coastal resource areas.	Remedial activities conducted will be consistent with substantive requirements of this regulation, as appropriate.
Land Under the Ocean	310 CMR 10.25	Requirements for conducting activities on land under the ocean or nearshore areas of land under the ocean or within their buffer zones that are found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention or flood control.	Site is within buffer zone of Land Under the Ocean.	Remedial activities conducted will be consistent with substantive requirements of this regulation, as appropriate.
Salt Marshes	310 CMR 10.32	Requirements for conducting activities within a salt marsh or within its buffer zone when a salt marsh is determined to be significant to the protection of marine fisheries, the prevention of pollution, storm damage prevention or groundwater supply.	Site is within buffer zone of Salt Marshes.	Remedial activities conducted will be consistent with substantive requirements of this regulation, as appropriate.
Land Containing Shellfish	310 CMR 10.34	Requirements for the protection of marine fisheries as well as to the protection of the interest of land containing shellfish.	Site is within buffer zone of Land Containing Shellfish.	Remedial activities conducted will be consistent with substantive requirements of this regulation, as appropriate.
Land Under the Ocean, Ponds, Streams, Rivers, Lakes, or Creeks that Underlie an Anadromous/Catadromous Fish Run ("Fish Run")	310 CMR 10.35	Requirements for protection of fish runs.	Fish runs occur between banks of Acushnet River. The site is within the buffer zone of this area.	Remedial activities conducted will be consistent with substantive requirements of this regulation, as appropriate.

**Table 14b**  
**Aerovox, Inc. Facility**  
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**Potential Location-Specific ARARs**

Regulation	Citation	Criterion/Standard	Applicability/Appropriateness	Consideration in the Removal Process / Action for Attainment
Riverfront Area	310 CMR 10.58	Requirements for the protection of private and public water supply; groundwater; provide flood control; prevent storm damage; prevent pollution; protect land containing shellfish; protect wildlife habitat; and to protect the fisheries.	Applicable to activities conducted within the Riverfront Area. The site is within the Riverfront Area (25 feet landward of the mean annual high-water line); thus the provisions of 310 CMR 10.58 apply.	The presumption requirements of 10.58 will be met, as the removal action is necessary to abate, minimize, stabilize, mitigate or eliminate the actual or potential release of PCBs from the site (Section III of the USEPA's Approval Memorandum). The work to be conducted within the Riverfront Area will be conducted with substantive requirements of this regulation, as appropriate.