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**APPENDIX C: APPLICABLE OR RELEVANT  
AND APPROPRIATE REQUIREMENTS  
AND TO BE CONSIDERED  
FOR ONONDAGA LAKE FEASIBILITY STUDY**

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## **SECTION C.1**

### **IDENTIFICATION OF FEDERAL AND STATE ARARS AND TBCS**

#### **C.1.1 INTRODUCTION**

The remediation of Onondaga Lake is subject to federal and state environmental statutes and regulations designated for Onondaga Lake in accordance with the CERCLA process for determining applicable or relevant and appropriate requirements (ARARs). Section 121(d)(1) of CERCLA, Title 42 of the United States Code, Section 9621(d)(1), 42 USC § 9621(d)(1), requires that response actions attain a degree of cleanup that assures protection of human health and the environment.

CERCLA also requires that response actions at least attain federal ARARs as well as any state ARARs that are more stringent than federal ARARs (unless an ARAR waiver becomes necessary). The National Contingency Plan (NCP) regulations, Title 40 of the CFR Part 300, [40 CFR § 300.435(b)(2)] which implement CERCLA's cleanup requirements, generally require ARAR compliance. Three categories of potentially applicable federal and state requirements and guidance were reviewed for this site: (1) chemical-specific; (2) location-specific; and (3) action-specific ARARs and TBCs. These are the same requirements assessed for each site regulated under CERCLA. CERCLA (42 USC § 9621(d)) and the NCP (40 CFR § 300.400(e)) provide that permits are not required for on-site response actions under CERCLA. USEPA has interpreted this exemption to "to waive the requirement to obtain a permit but not the substantive requirements that would be applied through permits." (see, e.g., Management of Remediation Waste Under CERCLA, USEPA, October 1998).

In addition to ARARs, advisories, criteria, or guidance may be evaluated as "To Be Considered" (TBC) regulatory items. The NCP provides that the TBC category may include advisories, criteria, or guidance that were developed by USEPA, other federal agencies, states, or local governments that may be useful in devising CERCLA remedies. These TBCs are not promulgated and, therefore, are not legally enforceable standards such as ARARs.

Consistent with EPA guidance, ARAR development and designation is a necessarily iterative process.

Appendix C is organized as follows:

- Section C.2 of Appendix C includes the statutes, regulations and guidance materials that appeared in Appendix B of the draft FS, all as revised to reflect the DEC November 2003 comments. It also reflects further ARAR/TBC analysis in response both to the DEC comments and to the scientific and engineering analyses that appear elsewhere in this FS.
  - o Section C.2 includes Tables C.1 (chemical-specific ARARs), C.3 (location-specific ARARs) and C.5 (action-specific ARARs) which summarize why each

ARAR generally qualifies or does not qualify as an applicable or relevant and appropriate ARAR. The potential utilization of each recommended ARAR for the Onondaga Lake remedial action is summarized in the status column of each table.

- o Section C.2 also includes Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs) which summarize why each TBC generally qualifies as such for purposes of the Onondaga Lake remedial action.
- Section C.3 of Appendix C provides a complete summary of ARAR recommendations for each of the Remedial Action Alternatives (RAA) retained for further analysis in this FS.
- Section C.4 provides detailed Tables C.7 and C.8 that identify all ARARs in connection with the recommended RAAs for SMUs 1 to 8. For convenience, standards for use in the FS as applicable or relevant and appropriate ARARs appear in bold in these tables.

## **SECTION C.2**

### **ARAR AND TBC IDENTIFICATION**

#### **C.2.1 CHEMICAL-SPECIFIC ARARS AND TBCS**

Chemical-specific ARARs are numerical values, established by promulgated standards, which are required to be used to set acceptable concentrations of chemicals that may be found in or discharged to the environment. Potential federal and state chemical-specific ARARs and TBCs associated with a remedial action for Onondaga Lake are listed in Tables C.1 and C.2, respectively. These tables list each chemical-specific ARAR for this response action, and provide a citation and a brief description and/or comment on the intended operation of that ARAR or TBC, where warranted.

The analysis of chemical-specific ARARs is provided below in the order provided in the RI Report:

##### **C.2.1.1 Air**

There are no promulgated chemical-specific ARARs for air.

##### **C.2.1.2 Biota**

There are no promulgated chemical-specific ARARs for biota.

##### **C.2.1.3 Sediment**

There are no promulgated chemical-specific ARARs for sediment.

#### **C.2.1.4 Federal--Safe Drinking Water Act (SDWA) Regulations, 40 CFR Part 141**

##### **Summary**

The Safe Drinking Water Act is intended to protect human health from contaminants through a system of drinking water standards measured at the tap (i.e., the National Primary Drinking Water Regulations), as well as through a number of other provisions that do not pertain to this site.

##### **Analysis**

The groundwater in the vicinity is considered potential potable water; therefore, the maximum contaminant levels and maximum contaminant level goals are relevant and appropriate.

For Onondaga Lake, these SDWA standards are not applicable (because they do not meet all the necessary jurisdictional requirements.) Neither the lake surface water nor groundwater that eventually reaches the lake is used as a source of potable water. In addition, there is no existing plan to use the lake as a future source of potable water because there are other more suitable and



readily available sources of potable water for the Syracuse area. Local water users receive public water from the Onondaga County Water Authority. The municipal water supply for Onondaga County comes from Otisco and Skaneateles Lakes and from Lake Ontario, all of which are located more than twenty miles away from Onondaga Lake. In addition, the New York State Atlas of Community Water System Sources does not list any municipal or non-municipal community water supply intakes in Onondaga County that could be impacted by Onondaga Lake.

### **ARAR Determination**

The SDWA and the SDWA regulations will be treated as a potential relevant and appropriate chemical-specific ARAR for the on-site Onondaga Lake remediation.

### **C.2.1.5 Federal--Clean Water Act (CWA) Regulations, 40 CFR Part 129**

#### **Summary**

Part 129 of the federal CWA regulations provides six specific Toxic Pollutant Effluent Standards that apply to the owners or operators of a building, structure, facility, or installation. Toxic Pollutant Effluent Standards in the federal Clean Water Act are provided for aldrin/dieldrin, DDT, endrin, toxaphene, benidene and PCBs, all of which adhere readily to sediment particles and are typically non-detectable in water samples.

#### **Analysis**

The CWA regulations may be relevant and appropriate for aldrin/dieldrin, DDT, endrin, toxaphene, benidene and PCBs detected in Onondaga Lake surface water.

For Onondaga Lake, these CWA regulations rely on the National Pollutant Discharge Elimination System (NPDES) permit program to implement the related prohibition on the point source discharge of these pollutants. As such, these CWA regulations are not applicable because they do not meet all the necessary jurisdictional requirements.

### **ARAR Determination**

Based on the analysis above, the CWA and the CWA regulations in 40 CFR Part 129 regulations are relevant and appropriate chemical-specific ARARs for purposes of the on-site Onondaga Lake remediation.

### **C.2.1.6 State--New York State Regulations, 6 NYCRR Parts 608, 700-706**

#### **Summary**

- Part 608 includes the requirement to obtain a State Pollution Discharge Elimination System (SPDES) permit for certain discharges in any navigable waters of the State (6 NYCRR 608.5). The standards for issuance of such a permit are general in nature and include environmental impacts and effect on water quality (6 NYCRR 608.7 and 8).
- The regulations in Parts 700 – 706 include water quality classifications, standards and guidance values.

- Part 700 provides definitions and describes collection and sampling procedures.
- Part 701 establishes classifications for surface waters and groundwater.
- Part 702 establishes the deviation and use of these standards and guidance values.
- Part 703 establishes surface water and groundwater quality standards and groundwater effluent limitations.
- Part 704 establishes criteria for thermal discharges.
- Part 705 contains references.
- Part 706 establishes additional procedures for the derivation of standards and guidance values that are protective of aquatic life from acute and chronic effects.

**Analysis**

- Substantive provisions of 6 NYCRR Part 608 that appear relevant and appropriate in the context of this on-site response action are:
  - o Section 608.6(a) (requiring development and submission of a sufficiently detailed construction plan with a map).
  - o Section 608.9(a) (requiring that construction or operation of facilities that may result in a discharge to navigable waters demonstrate compliance with CWA §§ 301 – 303, 306 and 307 and 6 NYCRR § 751.2 (prohibited discharges) and 754.1 (effluent prohibitions; effluent limitations and water quality-related effluent limitations; pretreatment standards; standards of performance for new sources.)
- Part 608 is not a potentially applicable ARAR for on-site response if the remedy selected involves either sediment capping or dredging.
  - o 6 NYCRR § 750-1.5(a)(7) generally exempts dredged or fill material and dredge return water discharged into waters of the state from SPDES permit requirements except in statutory circumstances that do not apply here.
  - o The provisions in Part 608 that generally prohibit excavation or placement of fill or impounding structures in streams without a DEC permit also do not qualify as an applicable ARAR for Onondaga Lake because Part 608 does not apply to “a pond or lake having a surface area of greater than 10 acres at mean low water level”, 6 NYCRR § 608.1(t).
- Parts 700 and 705 are not applicable or relevant and appropriate because they are administrative or procedural in nature.
- In Part 701, the descriptions of the classifications assigned to waters of the State, including the classifications assigned to the lake, as well as a general prohibition on any discharge that impairs the receiving water for its assigned best usages are relevant and appropriate ARARs.
- Part 702 includes procedures used for deriving water quality standards and guidance values which are not applicable or relevant and appropriate because they are administrative or procedural in nature.

- Part 703 includes general and chemical-specific water quality standards and is relevant and appropriate.
- Part 704 would not be relevant and appropriate to alternatives involving dredging, dewatering and discharge to the lake because no thermal discharges are otherwise anticipated as a result of the cleanup of the site.
- Part 706 includes procedures for developing water quality standards and guidance values to protect aquatic life which are not applicable or relevant and appropriate because they are administrative or procedural in nature.

**ARAR Determination**

Substantive provisions of 6 NYCRR §§ 608.6(a) and 608.9(a) are potential relevant and appropriate chemical-specific ARARs for the on-site response. In addition, substantive provisions in Parts 703 and 704 are potential relevant and appropriate chemical-specific ARARs for the on-site response.

**C.2.2 LOCATION-SPECIFIC ARARS AND TBCS**

Location-specific ARARs may restrict the conduct of activities or concentrations of hazardous substances based solely on the particular characteristics of a site. Potential federal and state location-specific ARARs and TBCs considered in connection with the Onondaga Lake response action are listed in Tables C.3 and C.4, respectively. These tables list each location-specific ARAR, and provide a regulatory citation and brief description and/or comment on the intended operation of that ARAR or TBC, where warranted. The determination of the potential use of each recommended ARAR is summarized in the status column of each table.

**C.2.2.1 Federal--Executive Order No. 11988, Floodplain Management, 42 Fed. Reg. 26951 (May 25, 1977)****Summary**

This Executive Order provides the circumstances where federal executive agencies should manage floodplains.

**Analysis**

This Executive Order is technically a TBC. It is not applicable because Honeywell is not a federal executive agency (*i.e.*, the only organizations that are required to comply with any executive order are federal agencies) and the site and the off-site area are not federal property. The Executive Order also is not relevant and appropriate because its provisions are not intended to apply to private parties, and no federal money is expected to be used for this cleanup.

**ARAR Determination**

Federal Executive Order 11988 is a TBC for the Onondaga Lake remediation.

**C.2.2.2 Federal--Executive Order No. 11990, Protection of Wetlands, 42 Fed. Reg. 26961 (May 25, 1977)****Summary**

This Executive Order provides the circumstances where federal executive agencies should protect wetlands.

**Analysis**

This Executive Order is technically a TBC. It is not applicable here because Honeywell is not a federal agency (*i.e.*, the only organizations that are required to comply with any executive order are federal agencies) and the site and the off-site area are not federal property. The Executive Order also is not relevant and appropriate because its provisions apply only to federally undertaken, financed or assisted construction and improvements, and no federal money is expected to be used for this cleanup.

**ARAR Determination**

This Federal Executive Order is a TBC for the Onondaga Lake remediation.

**C.2.2.3 Federal—EPA Regulations, 40 CFR Part 6, Subpart A****Summary**

These regulations describe EPA procedures for implementing the requirements of the Council of Environmental Quality (CEQ) on the National Environmental Policy Act (NEPA.)

**Analysis**

These EPA regulations may be relevant and appropriate for purposes of enhancing the NCP process, depending on the location of on-site RAAs. Subpart A of Part 6 is not applicable because these EPA regulations are intended to implement NEPA and the related CEQ regulations in 40 CFR Parts 1500 – 1517, but NEPA and the NEPA regulations are inapplicable here since CERCLA and the NCP solely govern this remediation.

**ARAR Determination**

Subpart A of 40 CFR Part 6 will be treated as a potential relevant and appropriate location-specific ARAR for on-site response at Onondaga Lake depending on the circumstances.

**C.2.2.4 Federal--Fish and Wildlife Coordination Act (FWCA), 16 USC § 662****Summary**

This federal statutory provision requires consultation with the United States Fish and Wildlife Service whenever a public or private agency, under a federal permit or license, seeks to impound, divert, deepen, control, or modify any body of water.

**Analysis**

Substantive, non-procedural, non-permit related provisions of 16 USC § 662 may be relevant and appropriate as a location-specific ARAR for the on-site response, depending on the RAOs and location(s) chosen for cleanup of the site. The permit-related requirements of Section 662 are not applicable because this statute is predicated on the FWCA being directly controlling and on a FWCA permit being required before any of the specified actions might lawfully proceed.

**ARAR Determination**

Section 662 may be applicable or relevant and appropriate as a location-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the location(s) chosen for managing site residuals.

**C.2.2.5 Federal--Fish and Wildlife Coordination Act (FWCA) Regulations, 40 CFR  
§ 6.302****Summary**

This federal statute requires EPA to apply Executive Order 11990, *Protection of Wetlands*, Executive Order 11988, *Floodplain Management*, the EPA Policy to Protect Environmentally Significant Agricultural Lands, the Coastal Zone Management Act, and the Wild and Scenic Rivers Act in EPA administrative programs in circumstances where these apply.

**Analysis**

This regulation is neither applicable nor relevant and appropriate as a potential location-specific ARAR for this site because there are no wild and scenic rivers, coastal barriers, wilderness areas or significant agricultural lands on site.

**ARAR Determination**

These FWCA regulations are not a location-specific ARAR for the Onondaga Lake remediation.

**C.2.2.6 Federal—National Historic Preservation Act (NHPA) Regulations, 36 CFR  
Part 800****Summary**

These federal regulations were adopted to implement the NHPA and to preserve for public use historic and cultural sites of national significance by requiring federal agencies, among other things, to preserve all historic properties that they own and control, notify the federal Department of the Interior of projects that will cause the loss of significant historic materials, and request preservation assistance from the Department of the Interior.

**Analysis**

Whether cultural resources exist along the lake shoreline in the southwest corner of Onondaga Lake continues to be assessed. A Stage IA cultural resource survey may need to be performed for the project area.

**ARAR Determination**

Until contrary information becomes known, the NHPA regulations will be treated as applicable location-specific ARARs for the Onondaga Lake remediation.

**C.2.2.7 State--New York State Freshwater Wetlands Law (NYSFWL) Regulations,  
6 NYCRR Parts 662 – 665****Summary**

Part 662 of this administrative code provides interim permit procedures for freshwater wetlands. Part 663 provides the state freshwater wetland permit requirements. Part 664 provides the state freshwater wetlands maps and classification procedures. Part 665 provides the state regulatory procedures for local government implementation of the Freshwater Wetlands Act and statewide minimum land-use regulations for freshwater wetlands.

**Analysis**

- Substantive provisions of 6 NYCRR Parts 662-664 may be relevant and appropriate as potential location-specific ARARs for on-site response, depending on the locations chosen for cleanup actions.
- Provisions of 6 NYCRR Parts 662 - 665 may be applicable as potential location-specific ARARs for off-site remedial actions.
- The permit-related requirements of Parts 662 and 663 are not applicable because these regulations are predicated on the NYSFWL being directly controlling, and on a FWCA permit being required before any of the specified actions might lawfully proceed.
- In Part 664, the mapping and classification procedures are not applicable on-site because they are designed to further the permitting system, which is inapplicable on-site.
- Part 665 is neither applicable nor relevant and appropriate because Honeywell is not a local government, and local government wetland or land-use regulations are not ARARs under CERCLA.

Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive, non-procedural, non-permit related provisions of 6 NYCCR Parts 662 – 664 may be relevant and appropriate as potential location-specific ARARs for on-site response, depending on the RAOs and location(s) chosen for cleanup of the site. Provisions of 6 NYCCR

Parts 662 – 665 may be applicable or relevant and appropriate as location-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the location(s) chosen for managing site residuals.

#### **C.2.2.8 State--New York State Regulations, 6 NYCRR § 373-2.2 - 100-Year Floodplain**

##### **Summary**

Section 373-2.2 is part of 6 NYCRR Subpart 373-2, the Final Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities. Subsection 373-2.2(j) provides that hazardous waste facilities located in the 100-year floodplain must be designed, constructed, and operated to prevent washout in a 100-year flood, except in limited circumstances with DEC's approval.

##### **Analysis**

Substantive, non-procedural, non-permit related provisions of 6 NYCRR § 373-2.2(j) may be relevant and appropriate as a location-specific ARAR for the on-site response, depending on the RAAs and location(s) chosen for cleanup of the site. Provisions of 6 NYCRR § 373-2.2 may be applicable or relevant and appropriate as location-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the location(s) chosen for managing site residuals.

Subsection 373-2.2(j) is not applicable because the state is not the regulating authority under CERCLA at this site and any hazardous substance facility constructed on-site will not be directly subject to state hazardous waste regulation and control.

Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

##### **ARAR Determination**

Substantive provisions of 6 NYCRR § 373-2.2 may be relevant and appropriate as a location-specific ARAR for the on-site response, depending on the RAAs and location(s) chosen for cleanup of the site

#### **C.2.2.9 State--New York State Regulations, 6 NYCRR Part 182**

##### **Summary**

- Part 182 provides references in Section 182.1.
- Section 182.2 provides definitions.
- Section 182.3 prohibits the taking, importing, transporting, possessing or selling of any endangered or threatened species of fish or wildlife without a DEC permit.
- Section 182.4 provides license and permit procedures.
- Section 182.5 provides special rules for the importing or possession of an alligator, caiman or crocodile.



- Section 182.6 designates certain endangered species, threatened species and species of special concern in the state.
- Section 182.7 establishes special rules for lake sturgeon.

**Analysis**

- Substantive, non-procedural, non-permit related provisions of 6 NYCCR §§ 182.3 and 182.6 may be relevant and appropriate as location-specific ARARs for the on-site response, depending on the RAOs and location(s) chosen for cleanup of the site.
- Provisions of 6 NYCCR § 182.3, 182.4 and 182.6 may be applicable or relevant and appropriate as location-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the RAOs and location(s) where site residuals are to be managed.
- Sections 182.1 and 182.2 are not ARARs because they are purely administrative or procedural in nature.
- The substance of the non-permit/license- related portions of Section 182.3 is not applicable on-site because they are designed to further the permitting system, which is inapplicable on-site.
- Provisions of Section 182.5 for alligators, caimans, and crocodiles are not ARARs because these species are not found at, nor do they have appropriate habitat within Onondaga Lake throughout any of their life cycles.
- For similar reasons, the Section 182.7 special provisions for lake sturgeon are not an ARAR.
- The Section 182.6 classification system is not applicable on-site because they are designed to further the permitting system, which is inapplicable on-site.

Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

- Substantive provisions of 6 NYCCR §§ 182.3 and 182.6 may be relevant and appropriate as location-specific ARARs for the on-site response, depending on the RAOs and location(s) chosen for cleanup of the site.
- Provisions of 6 NYCCR §§ 182.3, 182.4 and 182.6 may be applicable or relevant and appropriate as location-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the RAOs and location(s) where site residuals are to be managed.

**C.2.2.10 Endangered Species Act (ESA), 16 USC §§ 1531 et. seq.****Summary**

The ESA consists of:

- A statement of Congressional findings and declaration of purposes (16 USC § 1531).



- Definitions (16 USC § 1532).
- A general description of the process for determination of endangered species and threatened species (16 USC § 1533).
- Establishes a process to promote the acquisition of land for the preservation of endangered species and threatened species (16 USC § 1534).
- A process to promote state, interagency and international cooperation on endangered species and threatened species issues (16 USC §§ 1535 - 1537).
- A process for implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (16 USC § 1537a).
- Prohibited acts with respect to endangered species and threatened species (16 USC § 1538).
- Exceptions to the ESA (16 USC § 1539).
- Penalties and enforcement of the ESA (16 USC § 1540).
- Review of endangered plants (16 USC § 1541).
- Authorization for appropriations (16 USC § 1542).
- Construction of the ESA with the Marine Mammal Protection Act (16 USC § 1543).
- Provides for an annual accounting of federal and state expenditures for the conservation of endangered or threatened species (16 USC § 1544).

**Analysis**

- The prohibition in Section 1538 of certain acts with respect to endangered species and threatened species constitutes substantive environmental protection requirements which are relevant and appropriate requirements.
- The permit-related requirements of Section 1539 are not applicable because these requirements are predicated on ESA being directly controlling, and on an ESA permit being required before any of the specified actions might lawfully proceed. However, other aspects of Section 1539 may be relevant and appropriate as location-specific ARARs, depending on the circumstances, as described in C.2.6.3 below.
- Sections 1531 – 1537a and 1540 -1544 are not cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under Federal environmental or state environmental or facility siting law.

**ARAR Determination**

The prohibitions in Section 1538 of certain acts with respect to endangered species and threatened species are applicable as a potential location-specific ARAR for the Onondaga Lake site remediation.

Sections 1531 – 1537a and 1540 -1544 are not applicable or relevant and appropriate location-specific ARARs.

Substantive provisions of Section 1539 may be relevant and appropriate as a location-specific ARAR for the on-site response, depending on the RAOs and the relationship to critical habitat at the site.

The provisions of Section 1539 also may be applicable or relevant and appropriate as a location-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the location(s) chosen for managing site residuals and relationship to off-site critical habitat.

#### **C.2.2.11 Federal--CWA Regulations, 33 CFR Parts 320 – 330 and 40 CFR Part 230 and 231**

##### **Summary**

In 33 CFR:

- Part 320 establishes the U.S. Army Corp of Engineers' (USACE) general regulatory policies.
- Part 321 establishes requirements for permits for dams and dikes in navigable waters of the United States.
- Part 322 establishes requirements for permits for structures or work in or affecting navigable waters of the United States.
- Part 323 provides definitions that pertain to the CWA Section 404 program for discharges of dredged or fill material and specifies the activities that do not require permits.
- Part 324 establishes requirements for permits for ocean dumping of dredged materials.
- Part 325 establishes requirements for the processing of USACE permits.
- Part 326 establishes requirements for enforcement of wetland dredge and fill permits.
- Part 327 establishes requirements for hearings on wetland dredge and fill permits.
- Part 328 establishes the definition of waters of the United States.
- Part 329 establishes the definition of navigable waters of the United States.
- Part 330 establishes the nationwide permit program.

In Title 40 of the CFR:

- Part 230 sets forth the CWA Section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material, and implements 33 USC § 1344 for the review of proposed discharges of dredged or fill material into navigable waters.
- Part 231 sets forth the CWA Section 404(c) requirements for EPA's procedures prohibiting or withdrawing the specification, or denying, restricting, or withdrawing the use for specification of any defined area as a disposal site for dredged or fill material.

**Analysis**

- Substantive aspects of the statement of regulatory policy in 33 CFR 320 and the guidelines in 40 CFR Part 230 may be relevant and appropriate location-specific requirements depending on the RAA.
- Part 324 is not an action-specific ARAR because this site is not located on an ocean.
- Parts 231 and 325 are not location-specific ARARs because they are procedural in nature.
- Parts 326 and 327 are not location-specific ARARs because they only relate to enforcement or hearing procedures.
- While not applicable, the regulatory definitions or exclusions from CWA dredge and fill regulations in Parts 323, 328, 329 and 330 may be relevant and appropriate location-specific requirements depending on the RAA.
- Parts 321 and 322 are not applicable location-specific ARARs at this CERCLA site because these regulations are predicated on the CWA regulations being directly controlling and on a CWA permit being required before any of the specified actions might lawfully proceed. However, it is solely CERCLA which controls actions at this site; other laws may pertain to this site only to the extent allowed by 42 USC § 9621(d), and the NCP in 40 CFR § 300.400(e) explicitly provides that permits are not required for on-site response actions under CERCLA. Therefore, all permit-related requirements of Parts 321 and 322 are not applicable as location-specific ARARs the on-site response actions.

Other aspects of these standards may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

- Substantive provisions of Parts 321 and 322 may be relevant and appropriate as location-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site.
- Provisions of Parts 321 – 323, 329 - 330 may be applicable or relevant and appropriate as location-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3 ACTION-SPECIFIC ARARS AND TBCS**

Action-specific ARARs generally set performance or design standards, controls, or restrictions on particular types of activities. To develop technically feasible alternatives, applicable performance or design standards must be considered during the development of all reasonable response action alternatives. The precise action-specific ARARs for this site will be subsequently determined based upon the technology or technologies chosen to remediate the site.

Potential federal and state action-specific ARARs and TBCs evaluated in connection with this response action are listed in Tables C.5 and C.6, respectively. These tables list each action-

specific ARAR and TBC for remediation of Onondaga Lake and provide a regulatory citation and a brief description and/or comment on the intended operation of each ARAR or TBC, where warranted. The determination of the potential use of each recommended ARAR is provided in the status column of each table.

### **C.2.3.1 Federal--Toxic Substances Control Act (TSCA) Regulations, 40 CFR Part 761**

#### **Summary**

Part 761 generally contains the federal regulations on the manufacturing, processing, and distribution of certain toxic substances in commerce and use prohibitions and includes in pertinent part:

- Section 761.65 establishing the TSCA requirement for PCB storage for disposal.
- Section 761.70 establishing the TSCA requirement for PCB incineration.
- Section 761.71 establishing the TSCA requirement for disposal of PCBs in high efficiency boilers.
- Section 761.72 establishing the TSCA requirement for disposal of PCBs in scrap metal recovery ovens and smelters.
- Section 761.75 establishing the TSCA requirement for disposal of PCBs in chemical waste landfills.

#### **Analysis**

The PCB regulations in 40 CFR §§ 761.65 – 761.75 are not applicable because none of the lake sediment samples analyzed contain more than 50 ppm of PCBs, which is the trigger concentration for PCB spill remediation to occur. None of the non-PCB regulations in Part 761 are applicable because they do not meet the necessary jurisdictional requirements since none of those substances were detected at the site at close to the actionable levels listed in these regulations. Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

Substantive, non-procedural, non-permit related provisions of 40 CFR §§ 761.65 – 761.75 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 40 CFR §§ 761.65 – 761.75 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

#### **ARAR Determination**

Substantive provisions of 40 CFR §§ 761.65 – 761.75 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 40 CFR §§ 761.65 – 761.75 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.2 Federal--Clean Air Act (CAA) Regulations, 40 CFR Parts 52, 60, 61 and 63****Summary**

- Part 52 provides the federal regulations that govern the approval and promulgation of state implementation plans.
- Part 60 provides the federal standards that govern performance for new stationary sources.
  - o Part 61 provides National Emission Standards for Hazardous Air Pollutants (NESHAP) for a variety of chemicals; and Part 63 provides NESHAPs for additional chemicals.

**Analysis**

- Substantive, non-procedural, non-permit related provisions of Parts 60, 61 and 63 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site.
- Provisions of Parts 60, 61 and 63 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.
- The Part 52 regulations are neither applicable nor relevant and appropriate because the approval and promulgation of state implementation plans bear no relationship to remediating Onondaga Lake.
- The permit-related requirements of Parts 60, 61 and 63 are not applicable because these regulations are predicated on the CAA being directly controlling and on a CAA permit being required before any of the specified actions might lawfully proceed.

Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive provisions of Parts 60, 61 and 63 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Parts 60, 61 and 63 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.3 Federal—Resource Conservation and Recovery Act (RCRA) Regulations, 40 CFR Part 257****Summary**

Part 257, Subpart A, sets forth the federal criteria for classification of solid waste disposal facilities and practice; and Subpart B provides disposal standards for the receipt of conditionally exempt small quantity generator (CESQG) wastes at non-municipal, non-hazardous waste disposal units.

**Analysis**

The regulations in Subpart B of Part 257 are neither applicable nor relevant and appropriate because CESQG wastes are not expected to be a subject of the on-site remediation of Onondaga Lake. The permit-related requirements of Part 257, Subpart A, also are not applicable because these regulations are predicated on RCRA being directly controlling at this site and on a RCRA permit being required before any of the specified actions might lawfully proceed. However, it is solely CERCLA which controls at this site; other laws may pertain to this site only to the extent allowed by 42 USC § 9621(d), and the NCP in 40 CFR § 300.400(e) explicitly provides that permits are not required for on-site response actions under CERCLA. Therefore, all permit-related requirements of Part 257, Subpart A, are not applicable as action-specific ARARs for the on-site response actions.

Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive, non-procedural, non-permit related provisions of Part 257, Subpart A, may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Part 257, Subpart A, may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.4 Federal RCRA, 40 CFR Parts 261, 262, and Subparts B, F, G, J, K, L, N, S, X of Part 264, 265, and 268 (with separate reference to 40 CFR § 262.11, 262.34, 264.13(b), and 264.232)****Summary**

- Part 261 provides the federal regulations on the identification and listing of hazardous waste.
- Part 262 provides the federal standards for generators of hazardous waste.
- Part 264 sets forth the standards for owners and operators of hazardous waste treatment, storage and disposal facilities.
  - o Subpart B provides general facility standards.
  - o Subpart F concerns releases from solid waste management units.
  - o Subpart G provides facility closure and post-closure procedures.
  - o Subpart J provides the hazardous waste management procedures for tank systems.
  - o Subpart K provides the hazardous waste management procedures for surface impoundments.
  - o Subpart L provides the hazardous waste management procedures for waste piles.
  - o Subpart N provides the hazardous waste management procedures for landfills.

- o Subpart S provides the corrective action procedures for solid waste management units.
  - o Subpart X provides the hazardous waste management procedures for miscellaneous units.
- Part 265 sets forth the interim status standards for owners and operators of TSD facilities.
  - o Subpart B provides general facility standards.
  - o Subpart F concerns ground-water monitoring.
  - o Subpart G provides facility closure and post-closure procedures.
  - o Subpart J provides the hazardous waste management procedures for tank systems.
  - o Subpart K provides the hazardous waste management procedures for surface impoundments.
  - o Subpart L provides the hazardous waste management procedures for waste piles.
  - o Subpart N provides the hazardous waste management procedures for landfills.
  - o Note that there are no Subparts S or X in Part 265 as suggested in the RI.
- Part 268 sets forth the federal land disposal restrictions (LDR) for hazardous wastes, and Subpart C provides the more specific prohibitions on hazardous waste land disposal.

### **Analysis**

Substantive, non-procedural, non-permit related provisions of Part 261, 262, 264, 265, and 268 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site.

Provisions of Part 261, 262, 264, 265, and 268 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

The permit-related requirements of Part 261, 262, 264, 265, and 268 are not applicable because these regulations are predicated on RCRA being directly controlling at this site and on a RCRA permit being required before any of the specified actions might lawfully proceed.

Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

### **ARAR Determination**

Substantive provisions of Part 261, 262, 264, 265, and 268 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Part 261, 262, 264, 265 and 268 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.



**C.2.3.5 Federal RCRA, 62 Fed. Reg. 25997 (May 12, 1997)****Summary**

The May 12, 1997 *Federal Register* notice published at 62 Fed. Reg. 25997 primarily contains EPA's decision not to finalize the proposed Phase IV land disposal restriction provisions, but it does include some changes to the definition of solid waste for mineral processing materials that could impact the land disposal of mineral processing wastes.

**Analysis**

This final rulemaking is neither applicable nor relevant and appropriate because the land disposal of mineral processing wastes does not appear to be relevant to the remediation of Onondaga Lake.

**ARAR Determination**

This final rule is not an action-specific ARAR or TBC for the Onondaga Lake remediation.

**C.2.3.6 Federal--CWA Regulations, 33 CFR Parts 320 – 330 and 40 CFR Part 230 and 231****Summary**

In 33 CFR:

- Part 320 establishes the U.S. Army Corps of Engineers' (USACE) general regulatory policies.
- Part 321 establishes requirements for permits for dams and dikes in navigable waters of the United States.
- Part 322 establishes requirements for permits for structures or work in or affecting navigable waters of the United States.
- Part 323 provides definitions that pertain to the CWA Section 404 program for discharges of dredged or fill material and specifies the activities that do not require permits.
- Part 324 establishes requirements for permits for ocean dumping of dredged materials.
- Part 325 establishes requirements for the processing of USACE permits.
- Part 326 establishes requirements for enforcement of wetland dredge and fill permits.
- Part 327 establishes requirements for hearings on wetland dredge and fill permits.
- Part 328 establishes the definition of waters of the United States.
- Part 329 establishes the definition of navigable waters of the United States.
- Part 330 establishes the nationwide permit program.



In Title 40 of the CFR:

- Part 230 sets forth the CWA Section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material, and implements 33 USC § 1344 for the review of proposed discharges of dredged or fill material into navigable waters.
- Part 231 sets forth the CWA Section 404(c) requirements for EPA's procedures prohibiting or withdrawing the specification, or denying, restricting, or withdrawing the use for specification of any defined area as a disposal site for dredged or fill material.

### **Analysis**

- Substantive aspects of the statement of regulatory policy in 33 CFR 320 and the guidelines in 40 CFR Part 230 may be relevant and appropriate action-specific requirements depending on the RAA.
- Part 324 is not an action-specific ARAR because this site is not located on an ocean.
- Parts 231 and 325 are not action-specific ARARs because they are procedural in nature.
- Parts 326 and 327 are not action-specific ARARs because they only relate to enforcement or hearing procedures.
- While not applicable, the regulatory definitions or exclusions from CWA dredge and fill regulations in Parts 323, 328, 329 and 330 may be relevant and appropriate action-specific requirements depending on the RAA.
- Parts 321 and 322 are not applicable action-specific ARARs at this CERCLA site because these regulations are predicated on the CWA regulations being directly controlling and on a CWA permit being required before any of the specified actions might lawfully proceed. However, it is solely CERCLA which controls actions at this site; other laws may pertain to this site only to the extent allowed by 42 USC § 9621(d), and the NCP in 40 CFR § 300.400(e) explicitly provides that permits are not required for on-site response actions under CERCLA. Therefore, all permit-related requirements of Parts 321 and 322 are not applicable as action-specific ARARs the on-site response actions.

There are no promulgated regulations regarding the design and construction of the sediment consolidation area (SCA). Nonetheless, portions of CWA that regulate the discharge of dredge material could impact the design of the SCA. For example, section 230.10(b)(1), which prohibits the disposal of dredged material that violates water quality standards, after consideration of disposal site dilution and dispersion, would apply to the effluent or runoff discharged from the SCA. Section 230.10(c)(1) requires consideration of effects on municipal water supplies. Section 230.11 requires consideration of a broad range of possible effects from proposed dredged material discharges.

The USACE and U.S. Environmental Protection Agency have jointly prepared a guidance document for management of contaminated dredged material (USEPA/USACE [1992])

Evaluating Environmental Effects of Dredged Material Management Alternatives – A Technical Framework. EPA 8420B-92-008, Office of Water, Washington, D.C. Notably, this guidance document specifies that when contaminated dredged material is placed in CDFs, an analysis of pathways of concern must be completed to determine if treatment or site control measures (such as liners, caps, groundwater pumping, or leachate control systems) are required. This guidance, as well as other guidance documents, such as USACE (2003) are considered TBCs for the SCA.

### **ARAR Determination**

Substantive provisions of Parts 321 and 322 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Parts 321 – 323, 329 - 330 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

In addition, the following are recommended as TBCs:

- USACE, Notice on Issuance of Nationwide Permits, 67 Fed. Reg. 2020 (Jan. 15, 2002).
- Letter from William R. Adriance, Chief Permit Administrator, to Richard Tomer and Paul G. Leuchner, Chiefs of the New York and Buffalo Districts of USACE, re. *Section 401 Water Quality Certification*, January 15, 2002 Nationwide Permits (Mar. 15, 2002).

### **C.2.3.7 Federal—CWA Regulations, 40 CFR Parts 121, 122, 125, 401 and 403.5**

#### **Summary**

- Part 121 establishes state certification procedures for requiring a federal license or permit under the CWA.
- Part 122 implements the National Pollutant Discharge Elimination System (NPDES) permits.
- Part 125 establishes criteria and standards for the NPDES system.
- Part 401 establishes effluent guidelines and standards.
- Section 403.5 establishes national pretreatment standards and prohibited discharges within the NPDES system.

#### **Analysis**

- Substantive, non-procedural, non-permit related provisions of Parts 121, 122, 125, 401 and Section 403.5 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site.
- Provisions of Parts 121, 122, 125, 401 and Section 403.5 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may

occur as part of remediation of the site, depending on the RAOs and technology chosen for cleanup of the site.

- The permit-related requirements of Parts 121, 122, 125, 401 and Section 403.5 are not applicable because these regulations are predicated on the CWA NPDES requirements being directly controlling at this site and on a CWA NPDES permit being required before any of the specified actions might lawfully proceed.
- Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

### **ARAR Determination**

Substantive provisions of Parts 121, 122, 125, 401 and Section 403.5 may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Parts 121, 122, 125, 401 and Section 403.5 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the RAOs and technology chosen for cleanup of the site.

### **C.2.3.8 Federal--Safe Drinking Water Act (SDWA) Regulations, 40 CFR Parts 144 – 147**

#### **Summary**

Part 144 establishes the SDWA underground injection control program; Part 145 establishes the state underground injection control program; Part 146 establishes the underground injection control program criteria and standards; and Part 147 sets forth the applicable underground injection control program in each state.

#### **Analysis**

These regulations are neither applicable nor relevant and appropriate for the cleanup of Onondaga Lake, because the underground injection control regulations are predicated on protecting groundwater that is used or may potentially be used as a public drinking water supply. The groundwater adjacent to Onondaga Lake is not used for any potable purpose and there are no plans for potable use in the future. Of equal significance, none of the remedies being evaluated for the on-site remediation of Onondaga Lake are expected to involve the underground injection of wastes, sediments, materials or waters.

### **ARAR Determination**

The SDWA regulations in 40 CFR Parts 144 – 147 are not action-specific ARARs for the Onondaga Lake remediation.

**C.2.3.9 Federal--U.S. Department of Transportation (DOT) Regulations, 40 CFR  
Parts 170 *et. seq.*****Summary**

Part 170 provides the United States DOT procedures for carrying out DOT's duties under the Hazardous Materials Transportation Act (HMTA). Part 171 provides general information, regulations and definitions in connection with the DOT HMTA.

**Analysis**

Substantive, non-procedural, non-permit related provisions of DOT's HMTA regulations may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of DOT's HMTA regulations may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

The permit-related requirements of DOT's HMTA regulations are not applicable on-site because these regulations are predicated on the DOT's HMTA regulations being directly controlling at this site and on a DOT HMTA manifest being required before any of the specified actions might lawfully proceed. Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive provisions of DOT's HMTA regulations may be relevant and appropriate as an action-specific ARAR for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of DOT's HMTA regulations may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.10 State--New York Regulations, 6 NYCRR Part 360****Summary**

Part 360 provides New York's general provisions for the regulation of solid waste management facilities. The Part 360 regulations also regulate the beneficial use of material that would normally be regulated as a "solid waste."

**Analysis**

Some aspects of these regulations may be relevant and appropriate, depending on the circumstances. The permit-related requirements of Part 360 are not applicable on-site because these regulations are predicated on the New York's solid waste management facility regulations being directly controlling and on a New York solid waste management facility permit being required before any of the specified actions might lawfully proceed. As described above in Subsection C.2.3.6 (Federal - CWA Regulations, 33 CFR Parts 320-330 and 40 CFR Parts 230 and 231), design and construction of an on-site SCA.

As described above in Section C.2.3.6 (Federal – CWA Regulations, 33 CFR Parts 320-330 and 40 CFR Parts 230 and 231), design and construction of an on-site SCA would comply with applicable or relevant and appropriate portions of the CWA and its implementing regulations, along with guidance issued by the EPA and USACE. Thus, design and construction of the SCA would provide protection to the same human populations and environmental endpoints as would a solid waste facility designed under 6 NYCRR Part 360. Unlike the solid waste regulations prepared for facilities that handle a wide range of municipal and industrial solid wastes, the CWA regulations and guidance documents were prepared specifically for management of contaminated dredged materials.

In situations where there are competing applicable or relevant and appropriate requirements, the best approach is to select those ARARs that are most germane to the remedial alternative under consideration. In the case of the SCA, the CWA regulations and EPA and USACE guidance documents are the most relevant. They were specifically designed for management of contaminated dredged material and include a system of laboratory tests, analytical methods and design criteria that would provide protection to human health and the environment.

### **ARAR Determination**

Substantive provisions of 6 NYCRR Part 360 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Part 360 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

### **C.2.3.11 State--New York Regulations, 6 NYCRR Parts 361, 364, 370 - 376**

#### **Summary**

- Part 361 provides the New York regulations for the siting of industrial hazardous waste facilities.
- Part 364 provides New York's waste transporter permits regulations.
- Part 370 provides the New York general hazardous management system regulations.
- Part 371 provides New York's regulations for the identification and listing of hazardous wastes.
- Part 372 provides the New York hazardous waste manifest system regulations and related standards for generators, transporters and facilities.
- Part 373 provides the New York interim status standards for owners and operators of hazardous waste facilities.
- Part 375 provides the New York inactive hazardous waste disposal sites regulations, manifest system regulations, and related standards for generators, transporters and facilities.
- Part 376 provides the New York land disposal restrictions regulations.

**Analysis**

Substantive, non-procedural, non-permit related provisions of 6 NYCRR Parts 361, 364, 370 - 376 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Parts 361, 364, 370 - 376 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

The permit-related requirements of Parts 361, 364, 370 - 376 are not applicable because these regulations are predicated on the New York's hazardous waste regulations being directly controlling and on a New York hazardous waste permit being required before any of the specified actions might lawfully proceed. Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive provisions of 6 NYCRR Parts 361, 364, 370 - 376 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Parts 361, 364, 370 - 376 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.12 State--New York Regulations, 6 NYCRR Parts 200, 202, 205, 207, 211, 212, 219 and 257****Summary**

- Part 200 provides the general provisions of the state's air resources regulations.
- Part 202 provides the state regulations for air emissions verification.
- Part 205 provides the state architectural surface coatings regulations.
- Part 207 provides the state regulatory control measures for air pollution episodes.
- Part 211 provides the general state prohibitions.
- Part 212 provides the general process emission sources regulations.
- Part 219 provides the state's incinerator regulations.
- Part 257 provides specific state air quality standards.

**Analysis**

Substantive, non-procedural, non-permit related provisions of 6 NYSCRR Parts 200, 202, 205, 207, 211, 212, 219 and 257 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYSCRR Parts 200, 202, 205, 207, 211, 212, 219 and 257 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.



The permit-related requirements of Parts 200, 202, 205, 207, 211, 212, 219 and 257 are not applicable here because these regulations are predicated on the New York's air resources regulations being directly controlling and on a New York air emissions permit being required before any of the specified actions might lawfully proceed. Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

### **ARAR Determination**

Substantive provisions of 6 NYCRR Parts 200, 202, 205, 207, 211, 212, 219 and 257 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Parts 200, 202, 205, 207, 211, 212, 219 and 257 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

### **C.2.3.13 State--New York Regulations, 6 NYCRR Part 608**

#### **Summary**

Part 608 provides the New York regulations for the use and protection of state waters.

#### **Analysis**

Substantive, non-procedural, non-permit related provisions of 6 NYCRR Part 608 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Part 608 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

The permit-related requirements of Part 608 are not applicable here because these regulations are predicated on the New York's water use and protection regulations being directly controlling and on a New York water use permit being required before any of the specified actions might lawfully proceed. Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

As noted above in the chemical-specific ARAR section (Section C.2.1.6 State New State Regulations, 6 NYCRR Parts 608, 700-706), dredged or fill material and dredge return water discharged into waters of the state are generally exempt from SPDES permit requirements. Therefore, the most relevant and appropriate regulations to govern the discharge of treated supernatant water from the SCA after dredging are state and federal CWA Section 404 regulations. The following paragraphs described how this discharge would be regulated under these regulations.

For non-CERCLA sites, dredge return water is regulated under Section 404 of the Clean Water Act and does not require and SPDES permit. *6 NYCRR § 750-1.5(a)(7); see Final Revisions to the Clean Water Act Regulatory Definitions of "Fill Material" and "Discharge of Fill Material", 67 Fed. Reg. 31129, 31135 (May 9, 2002).* Dredged material is defined as

“material that is excavated or dredged from water of the United States.” 33 CFR 323.2(c). Since the water from the SCA would be dredged from Onondaga Lake falls within the definition of dredge material it should be treated as such. The Army Corps of Engineers, to which authority over dredge and fill discharge permits has been delegated under the Clean Water Act, has stated that return water is regulated as a discharge of dredged material. {US Army Corps of Engineers, Regulatory Program Overview, available at <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/oceover.htm>. (“Activities...requiring Section 404 permits are limited to discharges of dredged or fill material into the waters of the United States. These discharges include return water from dredged material disposed of on the upland...” ) }

The substantive requirements of 33 CFR Parts 320 and 323 and 40 CFR Part 230 would apply to the return water discharge. These requirements may be met by showing that (a) the proposed discharge would fall within the substantive requirements for obtaining a general nationwide permit for dredging or (b) the substantive standards applied to individual dredging permits would be achieved. Additionally, the water discharge would need to meet the substantive water quality requirements imposed by New York State or entities seeking a dredged material discharge permit under Section 404 of the CWA. Thus, an applicant for a water quality certification must demonstrate that the discharge would meet applicable effluent limits and water quality standards in 6 NYCRR 608.

As specified in the federal regulations, discharge of dredged material will only be prohibited “if after consideration of disposal site dilution and dispersion, it causes or contributes to the violation of any applicable state water quality standard or violates any applicable toxic effluent limit” 40 CFR § 230.10(b). Moreover, the regulations state that a discharge of dredged material will not be permitted only if there is a practical alternative that would have less adverse environmental impact (40 CFR § 230.10(a)). Here the term “practicable” is defined as “available and capable of being done after taking into account cost, existing technology, and logistics in light of overall project purposes.” 40 CFR § 230.3. Also, any discharge of dredged materials must not cause or contribute to significant degradation of the waters of the United States (40 CFR § 230.10(c)). An evaluation of significant degradation would be based on a number of determinations and evaluations including the following:

- Impacts on the physical and chemical characteristics of the aquatic ecosystem,
- Impacts on the biological characteristics of the ecosystem,
- Impacts on wildlife refuges, wetlands, and mudflats and other sensitive areas, and
- Impacts on human use of the water system.

The Army Corps of Engineers has issued two nationwide permits that may be ARARs. Nationwide Permit 38 applies to “specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority...[as well as] court ordered remedial action plans or related settlements.” *Department of the Army, Corps of Engineers, Issuance of Nationwide Permits: Notice 67 Fed. Reg. 2019, 2085 (Jan. 15, 2002)*. Because New York State has issued a statewide water quality certification for discharges that



qualify for this nationwide permit, water quality certification is presumptive. Nationwide Permit 16 covers discharges of return water from upland contained disposal areas, irrespective of the purpose for which dredging was undertaken. *Department of the Army, Corps of Engineers. Issuance of Nationwide Permits: Notice, 67 Fed. Reg. 2019, 2081 (Jan. 15, 2002).* A discharge that meets the requirements for this nationwide permit must still meet the substantive state water quality certification standards, but may do so after consideration of site dilution and dispersion in accordance with 40 CFR § 230.10(b).

Additionally, state regulations pertaining to dredging projects may be ARARs. 6 NYCRR Section 608.8 provides the basis for issuance of a State dredge or fill permit. That provision states that a permit should issue if the project is (a) reasonable and necessary; (b) will not endanger the health, safety, or welfare of the people of New York; and (c) will not cause unreasonable, uncontrolled, or unnecessary damage to natural resources of the state. Discharge of supernatant water will not have substantial adverse impact on water quality outside the work area. It likely will not result in significant additional exceedances of water quality standards beyond those already resulting from dredging within the work area. Section 608.9 requires that any dredging project obtain state certification that it meets water quality standards and effluent limits under Section 401 of the CWA. However, Section 608.9 does not require that such standards be met at the point of discharge and does not contradict the mandates of the federal regulations that disposal site dilution and dispersion be taken into account.

### **ARAR Determination**

Substantive provisions of 6 NYCRR Part 608 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Part 608 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

#### **C.2.3.14 State--New York Regulations, 6 NYCRR Parts 700 – 706**

##### **Summary**

- The regulations in Parts 700 – 706 include water quality classifications, standards and guidance values.
- Part 700 provides definitions and describes collection and sampling procedures.
- Part 701 establishes classifications for surface waters and groundwater.
- Part 702 establishes the deviation and use of these standards and guidance values.
- Part 703 establishes surface water and groundwater quality standards and groundwater effluent limitations.
- Part 704 establishes criteria for thermal discharges.
- Part 705 contains references.
- Part 706 establishes additional procedures for the derivation of standards and guidance values that are protective of aquatic life from acute and chronic effects.

**Analysis**

- Parts 700 and 705 are not applicable or relevant and appropriate because they are administrative or procedural in nature.
- In Part 701, the descriptions of the classifications assigned to waters of the State, including the classifications assigned to the lake, as well as a general prohibition on any discharge that impairs the receiving water for its assigned best usages are relevant and appropriate ARARs.
- Part 702 includes procedures used for deriving water quality standards and guidance values which are not applicable or relevant and appropriate because they are administrative or procedural in nature.
- Part 703 includes general and chemical-specific water quality standards and is relevant and appropriate.
- Part 704 would not be relevant and appropriate to alternatives involving dredging, dewatering and discharge to the lake because no thermal discharges are otherwise anticipated as a result of the cleanup of the site.
- Part 706 includes procedures for developing water quality standards and guidance values to protect aquatic life which are not applicable or relevant and appropriate because they are administrative or procedural in nature.

Parts 700 – 706 are not applicable ARARs because all the necessary jurisdictional requirements are not met in the context of potential on-site response actions.

**ARAR Determination**

Substantive provisions of Parts 703 and 704 are potential relevant and appropriate action-specific ARARs for the on-site response.

**C.2.3.15 State--New York, 6 NYCRR Parts 750 – 758****Summary**

- Part 750 provides general regulatory provisions for the SPDES.
- Part 751 specifies the required SPDES permits.
- Part 752 provides SPDES permit application and data requirements.
- Part 753 provides notice and public participation requirements for SPDES permits.
- Part 754 specifies required provisions for SPDES permits.
- Part 755 provides requirements for the duration and reissuance of SPDES permits.
- Part 756 provides the monitoring, recording and reporting requirements for SPDES permits and schedules for compliance.
- Part 757 provides the process for modification, suspension and revocation of SPDES permits and schedules for compliance.

- Part 758 provides supporting references.

**Analysis**

Substantive, non-procedural, non-permit related provisions of 6 NYCRR Parts 750 – 758 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Parts 750 – 758 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

The permit-related requirements of Parts 750 – 758 are not applicable because these regulations are predicated on the New York SPDES regulations being directly controlling and on a New York SPDES permit being required before any of the specified actions might lawfully proceed. Other aspects of these regulations may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive provisions of 6 NYCRR Parts 750 – 758 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of 6 NYCRR Parts 750 – 758 may be applicable or relevant and appropriate as action-specific ARARs for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.16 State--New York State Environmental Conservation Law, Article 17,  
Title 5****Summary**

Title 5 consists of Section 17-0501, the general prohibition against pollution; Section 17-0503, the prohibition against pollution of waters of a marine district; 17-0505, the prohibition against certain acts without permit; 17-0507, the prohibition against modification of wastes discharged through an existing outlet or point source without permit; 17-0509, minimum treatment required; and 17-0511, restrictions on discharge of sewage, industrial waste or other waste.

**Analysis**

Substantive, non-procedural, non-permit related provisions of Sections 17-0501, 17-0503, 17-0505, 17-507, 17-0509 and 17-0511 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Sections 17-0501, 17-0503, 17-0505, 17-507, 17-0509 and 17-0511 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

The permit-related requirements of Sections 17-0501, 17-0503, 17-0505, 17-507, 17-0509 and 17-0511 are not applicable here because these statutes are predicated on the New York

Environmental Conservation Law (ECL) being directly controlling and on a New York ECL permit being required before any of the specified actions might lawfully proceed. Other aspects of these statutes may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive provisions of Sections 17-0501, 17-0503, 17-0505, 17-507, 17-0509 and 17-0511 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Sections 17-0501, 17-0503, 17-0505, 17-507, 17-0509 and 17-0511 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.17 State--New York State Environmental Conservation Law § 11-0503****Summary**

Section 11-0503 prohibits the polluting of streams by certain substances in quantities that are injurious to fish and protected wildlife and waterfowl.

**Analysis**

Substantive, non-procedural, non-permit related provisions of Section 11-0503 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Section 11-0503 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

This statute is predicated on the New York ECL being directly controlling. However, it is solely CERCLA which controls actions at this site; other laws may pertain to this site only to the extent allowed by 42 USC § 9621(d). Therefore, the requirements of Section 11-0503 are not applicable as an action-specific ARAR for the on-site response actions. Other aspects of this statute may be ARARs, depending on the circumstances, as described below.

**ARAR Determination**

Substantive provisions of Section 11-0503 may be relevant and appropriate as action-specific ARARs for the on-site response, depending on the RAOs and technology chosen for cleanup of the site. Provisions of Section 11-0503 may be applicable or relevant and appropriate as action-specific ARAR for any off-site response that may occur as part of remediation of the site, depending on the technologies chosen for cleanup of the site.

**C.2.3.18 Local-Local County or Municipal Pretreatment Requirements, Local Regulations****Summary**

If water from remedial cleanup work was sent to a publicly-owned water treatment facility, County or municipal pretreatment regulations would apply.

**Analysis**

CERCLA, the NCP, and USEPA guidance do not allow for consideration of local regulations as an ARAR for the on-site cleanup of a CERCLA site. Therefore, County or municipal pretreatment regulations and other local regulations are not an action-specific ARAR for purposes of the Onondaga Lake remediation. However, provisions of county or municipal pretreatment regulations and other local regulations may apply, according to their own terms, to the off-site transport, final disposal or treatment of remediation wastes from the site.

**ARAR Determination**

County or municipal pretreatment regulations and other local regulations are not an action-specific ARAR for purposes of the Onondaga Lake remediation.

**TABLE C.1**
**CHEMICAL-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs)**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
<b>WATER</b>			
Clean Water Act 40 [Federal Water Pollution Control Act; as amended], 33 USC §§ 1251-1387	40 CFR Part 129	Part 129 is a potential relevant and appropriate chemical-specific ARAR for purposes of on-site response	Toxic Pollutant Effluent Standards for aldrin/dieldrin, DDT, endrin, toxaphene, benzidene and PCBs. With the exception of PCBs, none of these compounds have been identified as a CPOI for Onondaga Lake in the RI, and none of these compounds, when measured, have been detected in Onondaga Lake surface water.
Safe Drinking Water Act, 42 USC §§ 300f - 300j-26	40 CFR Part 141	Part 141 is a potential relevant and appropriate chemical-specific ARAR for purposes of on-site response	National Primary Drinking Water Regulations
New York State Environmental Conservation Law (ECL) Article 15, Title 3 and Article 17, Titles 3 and 8			Part 608 includes the requirement to obtain a SPDES permit for certain discharges in any navigable waters of the State (6 NYCRR 608.5). The regulations contained in 6 NYCRR Parts 700 – 706 include water quality classifications, standards and guidance values.

**TABLE C.1**
**CHEMICAL-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs)**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
	6 NYCRR Part 608	Relevant and appropriate are Section 608.6(a) and 608.9(a).	<p>Note that:</p> <ul style="list-style-type: none"> <li>Section 608.6(a) requires development and submission of a sufficiently detailed construction plan with a map);</li> <li>Section 608.9(a) requires that construction or operation of facilities that may result in a discharge to navigable waters demonstrate compliance with CWA §§ 301 – 303, 306 and 307 and 6 NYCRR §§ 751.2 (prohibited discharges) and 754.1 (effluent prohibitions; effluent limitations and water quality-related effluent limitations; pretreatment standards; standards of performance for new sources.)</li> </ul>
	6 NYCRR Part 700	Part 700 is not applicable or relevant and appropriate because it is administrative or procedural in nature.	Part 700 provides definitions and describes collection and sampling procedures.
	6 NYCRR Part 701	Part 701 classifications of waters of the State, including classifications for the lake, as well as a general prohibition on any discharge that impairs the receiving water for its assigned best usages are relevant and appropriate.	Part 701 establishes classifications for surface waters and groundwater.

**TABLE C.1**
**CHEMICAL-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs)**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
	6 NYCRR Part 702	Part 702 procedures for deriving water quality standards and guidance values are not applicable or relevant and appropriate because they are administrative or procedural in nature.	Part 702 establishes the deviation and use of these standards and guidance values.
	6 NYCRR Part 703	Part 703 includes general and chemical-specific water quality standards that are relevant and appropriate	Part 703 establishes surface water and groundwater quality standards and groundwater effluent limitations.
	6 NYCRR Part 704	Part 704 potentially only be relevant and appropriate to alternatives involving dredging, dewatering at elevated temperatures and discharge to the lake at elevated temperatures.	Part 704 establishes criteria for thermal discharges.



**TABLE C.1**
**CHEMICAL-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs)**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
	6 NYCRR Part 705	Part 705 is are not applicable or relevant and appropriate because it is administrative or procedural in nature.	Part 705 contains reference sources for related regulations.
	6 NYCRR Part 706	Part 706 procedures for developing water quality standards and guidance values are not applicable or relevant and appropriate because they are administrative or procedural in nature.	Part 706 establishes additional procedures for the derivation of standards and guidance values that are protective of aquatic life from acute and chronic effects.
<b>AIR</b>			
No promulgated chemical-specific ARARs identified for air.			
<b>SEDIMENT</b>			
No promulgated chemical-specific ARARs identified for sediment.			
<b>BIOTA</b>			
No promulgated chemical-specific ARARs identified for fish (biota). The Food and Drug Administration (FDA) limits (e.g., 1 ppm mercury, 2 ppm PCBs) are not based on federal or state environmental law.			

**TABLE C.2**
**CHEMICAL-SPECIFIC POTENTIAL CRITERIA, ADVISORIES AND GUIDANCE TO  
BE CONSIDERED (TBC) IN THE RI AND FS**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
<b>BIOTA</b>			
International Joint Commission – United States and Canada	Great Lakes Water Quality Agreement of 1978, as amended	TBC	The concentration of total PCBs in fish tissue (whole fish, wet weight basis) should not exceed 0.1 µg/g for the protection of birds and animals that consume fish. Criterion for mercury is 0.5 µg/g mercury in whole fish [wet weight basis].
NOAA – Damage Assessment Center	Reproductive, Developmental and Immunotoxic Effects of PCBs in Fish: A Summary of Laboratory and Field Studies, March 1999 (Monosson, E.)	TBC	<p>The effective concentrations for reproductive and developmental toxicity fall within the ranges of the PCB concentrations found in some of the most contaminated fish. There are currently an insufficient number of studies to estimate the immunotoxicity of PCBs in fish.</p> <p>Improper functioning of the reproductive system and adverse effects on development may result from adult fish liver concentrations of 25 to 71 ppm Aroclor 1254.</p> <p>PCB Congener BZ #77: 0.3 to 5 ppm (wet wt) in adult fish livers reduces egg deposition, pituitary gonadotropin, and gonadosomatic index, alters retinoid concentration (Vitamin A), and reduces larval survival. 1.3 ppm in eggs reduces larval survival.</p>
DEC Division of Fish and Wildlife	Niagara River Biota Contamination Project: Fish Flesh Criteria for Piscivorous Wildlife, Technical Report 87-3, July 1987, pp. 41-48 and Table 26 (Newell <i>et al.</i> )	TBC	Provides a method for calculating concentrations of organochlorines in fish flesh for the protection of wildlife. The fish flesh criterion is 0.11 mg/kg wet wt for PCBs, 3 mg/kg for dioxin/furans, and 0.33 mg/kg for hexachlorobenzene.
<b>SEDIMENT</b>			
EPA Office of Emergency and Remedial Response	Guidance on Remedial Actions for Superfund Sites with PCB Contamination, EP A/540/G- 90/007, August 1990 (OSWER Dir. No. 9355.4-01).	TBC	Provides guidance in the investigation and remedy selection process for PCB-contaminated Superfund sites. Provides preliminary remediation goals for various contaminated media, including sediment (pp. 34-36) and identifies other considerations important to protection of human health and the environment.
NOAA – Damage Assessment Office	Development and Evaluation of Consensus-Based Sediment Effect	TBC	Estuarine, freshwater and saltwater sediment effects concentrations for total PCBs: Threshold Effect Concentration: 0.04 mg/kg

**TABLE C.2**

**CHEMICAL-SPECIFIC POTENTIAL CRITERIA, ADVISORIES AND GUIDANCE TO BE CONSIDERED (TBC) IN THE RI AND FS**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
	Concentrations for PCBs in the Hudson River, MacDonald Environmental Services Ltd., March 1999		Mid-range Effect Concentration: 0.4 mg/kg Extreme Effect Concentration: 1.7 mg/kg
NOAA (compilation of other literature sources for Sediment Quality Guidelines [SQGs])	Screening Quick Reference Tables for Organics (SQRTs)	TBC	Tables with screening concentrations for inorganic and organic contaminants.
EPA Great Lakes National Program Office, Assessment and Remediation of Contaminated Sediments (ARCS) Program	Calculation and Evaluation of Sediment Effect Concentrations for the Amphipod <i>Hyaella azteca</i> and the midge <i>Chironomus riparius</i> , EPA 905- R96-008, September 1996	TBC	Provides sediment effect concentrations (SECs), which are defined as the concentrations of a contaminant in sediment below which toxicity is rarely observed and above which toxicity is frequently observed.
DEC Division of Fish, Wildlife and Marine Resources	Technical Guidance for Screening Contaminated Sediment, January 1999	TBC	Includes a methodology to establish sediment criteria for the purpose of identifying contaminated sediments. Provides sediment quality screening values for non-polar organic compounds, such as PCBs, and metals to determine whether sediments are contaminated (above screening criteria) or clean (below screening criteria). Screening values are not cleanup goals. Also discusses the use of sediment criteria in risk management decisions.
DEC	TAMS, Onondaga Lake Baseline Ecological Risk Assessment (2002)	TBC	DEC/TAMs developed 5 site-specific SECs based on mortality results found for the chironomid sediment toxicity test in 1992: <ul style="list-style-type: none"> <li>• Effects Range-Low (ERL): 10<sup>th</sup> percentile of the concentration distribution for effects data</li> <li>• Threshold Effect Level (TEL): Geometric mean of the 15<sup>th</sup> percentile of the concentration distribution for the effects data and the median distribution for the no-effects data</li> <li>• Effects Range-Median (ERM): Median of the concentration distribution for the effects data</li> </ul>

**TABLE C.2**
**CHEMICAL-SPECIFIC POTENTIAL CRITERIA, ADVISORIES AND GUIDANCE TO  
BE CONSIDERED (TBC) IN THE RI AND FS**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
			<ul style="list-style-type: none"> <li>Probable Effect Level (PEL): Geometric mean of the ERM and the 85<sup>th</sup> percentile of the concentration distribution for the no-effects data</li> </ul> <p>Apparent Effects Threshold (AET): Concentration above which effects are always expected (i.e., the highest no-effects concentration)</p>
<b>SOIL</b>			
DEC-Division of Environmental Remediation	Technical Administrative Guidance Memorandum No. 94- Remediation HWR-4046	TBC	Recommended Soil Cleanup Objectives
<b>WATER</b>			
International Joint Commission – United States and Canada	Great Lakes Water Quality Agreement of 1978, as amended	TBC	The concentration of total PCBs in fish tissue (whole fish, wet weight basis) should not exceed 0.1 µg/g for the protection of birds and animals that consume fish. Criterion for mercury is 0.5 µg/g mercury in whole fish [wet weight basis].
USEPA	USEPA Safe Drinking Water Act	TBC	MCLPs
USEPA	USEPA Federal Register, Volume 57, No. 246, December 22, 1992	TBC	Ambient Water Quality Criteria
DEC	DEC TOGS 1.1.2	TBC	New York State Groundwater Effluent Limitations
<b>AIR</b>			
DEC	New York Air Cleanup Criteria, January 1990	TBC	Provides guidance for the control of ambient air contaminants in New York State.

**TABLE C.3**
**LOCATION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
Fish and Wildlife Coordination Act	16 USC § 662	Substantive portions of Section 662 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	Whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose, by any department or agency of the United States, such department or agency first shall consult with the United States Fish and Wildlife Service, Department of the Interior, and with the head of the agency exercising administration over the wildlife resources of the particular State in which the impoundment, diversion, or other control facility is to be constructed, with a view to the conservation of wildlife resources by preventing loss of and damage to such resources.
Endangered Species Act	16 USC §§ 1531 et. seq.	Substantive provisions in Sections 1538 is a potential applicable location-specific ARAR for on-site response. Substantive provisions in Sections 1539 is a potential relevant and appropriate location-specific ARAR for on-site response.	Federal statute establishing programmatic protection for endangered and threatened species.
Clean Water Act	33 CFR Parts 320-330	Substantive portions of Parts 320 – 330 are potential relevant and	Dredge and Fill in Wetlands

**TABLE C.3**
**LOCATION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
		appropriate location-specific ARAR for purposes of on-site response	
Section 404 of the Clean Water Act [Federal Water Pollution Control Act, as amended], 33 USC § 1344	33 CFR Parts 320-329	Substantive portions of Parts 320 – 329 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	Includes requirements for issuing permits for the discharge of dredged or fill material into navigable waters of the United States. A permit is required for construction of any structure in a navigable water.
National Historic Preservation Act, 16 USC § 470 <u>et seq.</u>	36 CFR Part 800	Substantive portions of Part 800 are a potential applicable location-specific ARAR for purposes of on-site response	Proposed remedial actions must take into account effect on properties in or eligible for inclusion in the National Registry of Historic Places. Federal agencies undertaking a project having an effect on a listed or eligible property must provide the Advisory Council on Historic Preservation a reasonable opportunity to comment pursuant to section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended. While the Advisory Council comments must be taken into account and integrated into the decision-making process, program decisions rest with the agency implementing the undertaking. A Stage 1A cultural resource survey is expected to be necessary for any active remediation to identify historic properties along the lakeshore to determine if any areas should be the subject of further consideration under NHPA.
Fish and Wildlife Coordination Act	40 CFR § 6.302	Not an applicable or relevant and appropriate location-specific ARAR	Modification to Waterways that Affect Fish or Wildlife

**TABLE C.3**
**LOCATION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
		for purposes of on-site response	
Procedures for Implementing the Requirements of the Council of Environmental Quality on the National Environmental Policy Act	40 CFR Part 6, Subpart A	Substantive portions of Subpart A are a potential relevant and appropriate location-specific ARAR for purposes of on-site response	Sets forth EPA policy and guidance for implementing NEPA and related CEQ regulations.
Clean Water Act Section 401, 33 USC 1341	40 CFR Part 121	Substantive portions of Part 121 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	State Water Quality Certification Program
Clean Water Act	40 CFR Parts 122, 125 and 401	Substantive portions of Parts 121, 125 and 401 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	Wastewater Discharge Permits; Effluent Guidelines, Best Available Technology and BMPPT
Safe Drinking Water Act	40 CFR Parts 144-147	Parts 144 – 147 are not potential location-specific ARARs for on-site response	Underground Injection Control Program
Clean Water Act, Section	40 CFR Parts 230 and 231	Substantive	No activity which adversely affects an

**TABLE C.3**
**LOCATION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
404, 33 USC § 1344		portions of Parts 230 and 231 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	aquatic ecosystem, including wetlands, shall be permitted if a practicable alternative that has less adverse impact is available. If there is no other practical alternative, impacts must be minimized.
Clean Water Act	40 CFR § 403.5	Substantive portions of Section 403.5 are a potential relevant and appropriate location-specific ARAR for purposes of on-site response	Discharge to Publicly-Owned Treatment Works
Toxic Substances Control Act (TSCA), Title 1, 15 USC § 2601	40 CFR §§ 761.65 – 761.75	Substantive portions of Sections 761.65 – 761.75 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	TSCA facility requirements: Establishes siting guidance and criteria <i>for</i> storage (761.65), chemical waste landfills (761.75), and incinerators (761.70).
New York State ECL Article 11, Title 5	6 NYCRR Part 182	Substantive portions of 6 NYCRR §§ 182.3 and 182.6 are potential relevant and appropriate location-specific ARAR for purposes of on-site response	The taking of any endangered or threatened species is prohibited, except under a permit or license issued by DEC. The destroying or degrading the habitat of a protected animal likely constitutes a "taking" of that animal under NY ECL § 11-0535.



**TABLE C.3**
**LOCATION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
New York State ECL Article 3, Title 3; Article 27, Titles 7 and 9	6 NYCRR § 373-2.2	Substantive portions of 6 NYCRR § 373- 2.2 are a potential relevant and appropriate location- specific ARAR for purposes of on-site response	Establishes construction requirements for hazardous waste facilities in 100- year floodplain.
New York State ECL Article 15, Title 5, 6 NYCRR Part 608 Use and Protection of Waters	6 NYCRR Part 608	Substantive portions of 6 NYCRR Part 608 are a potential applicable location- specific ARAR for purposes of on-site response	Protection of Waters Program
New York State Freshwater Wetlands Law, Environmental Conservation Law (ECL) Article 24, Title 7	6 NYCRR Parts 662-665	Substantive portions of Parts 662-664 are a potential relevant and appropriate location- specific ARAR for purposes of on-site response	Defines procedural requirements for undertaking different activities in and adjacent to freshwater wetlands, and establishes standards governing the issuance of permits to alter or fill freshwater wetlands.

**TABLE C.4**
**LOCATION-SPECIFIC POTENTIAL CRITERIA, ADVISORIES AND GUIDANCE TO  
BE CONSIDERED (TBC) IN THE RI AND FS**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
EPA Office of Solid Waste and Emergency Response	Policy on Floodplains and Waste and Wetland Assessments for CERCLA Actions, August 1985	TBC	Superfund actions must meet the substantive requirements of the Floodplain Management Emergency Executive Order (E.O. 11988) and the Protection of Response 1985 Wetlands Executive Order (E.O. 11990) (see Table 9-3: Location-Specific ARARs). This memorandum discusses situations that require preparation of a floodplain or wetlands assessment and the factors that should be considered in preparing an assessment for response actions taken pursuant to Section 104 or 106 of CERCLA. For remedial actions, a floodplain/wetlands assessment must be incorporated into the analysis conducted during the planning of the remedial action.
Executive Order No. 11988, 42 Fed. Reg. 26951 (May 25, 1977)	Floodplain Management	TBC	Executive Order describes the circumstances where federal agencies should manage floodplains.
Executive Order No. 11990, 42 Fed. Reg. 26961 (May 25, 1977)	Protection of Wetlands	TBC	Executive Order describes the circumstances where federal agencies should manage wetlands.

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
Section 10, Rivers and Harbors Act, 33 USC § 403	33 CFR Parts 320 - 330	Substantive portions of 33 CFR Parts 321 - 322 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	U.S. Army Corps of Engineers approval is generally required to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of the channel of any navigable water of the United States.
Clean Air Act, 42 USC s/s 7401 et seq. (1970)	40 CFR Part 52	Not an action-specific ARAR for purposes of this on-site response	Approval and Promulgation of Implementation Plans
Clean Air Act, 42 USC s/s 7401 et seq. (1970)	40 CFR Part 60	Substantive portions of 40 CFR Part 60 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Standards of Performance for New Stationary Sources
Clean Air Act, 42 USC s/s 7401 et seq. (1970)	40 CFR Parts 61 and 63	Substantive portions of 40 CFR Parts 61 and 63 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Part 61- National Emission Standards for Hazardous Air Pollutants. Part 63 - National Emission Standards for Hazardous Air Pollutants for Source Categories.

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
Section 402 of the Clean Water Act	40 CFR Parts 121, 122, 125, 401 and 403.5	Substantive portions of 40 CFR Parts 121, 122, 125, 401 and 403.5 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Provisions related to the implementation of the National pollutant Discharge Elimination System (NPDES) program
Safe Drinking Water Act	40 CFR Parts 144 - 147	Substantive portions of 40 CFR Parts 144 - 147 are not action-specific ARARs for purposes of on-site response	SDWA underground injection control program
Section 404(b) of the Clean Water Act,	40 CFR Part 230	Substantive portions of 40 CFR Part 230 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Guidelines for Specification of Disposal Sites for Dredged or Fill Material. Except as otherwise provided under Clean Water Act Section 404(b)(2), no discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences. Includes criteria for evaluating whether a particular discharge site may be specified.
Section 404(c) of the Clean Water Act, 33 USC § 1344(b)	33 CFR Parts 320, 323, 325, 329 and 330	Substantive portions of 33 CFR Parts 320, 323 325, 329 and 330 are potential relevant and	These regulations apply to all existing, proposed, or potential disposal sites for discharges of dredged or fill materials into U.S. waters, which include wetlands. Includes special policies, practices, and procedures to be followed by the U.S. Army Corps of

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
		appropriate action-specific ARARs for purposes of on-site response	Engineers in connection with the review of applications for permits to authorize the discharge of dredged or fill material into waters of the United States pursuant to Section 404 of the Clean Water Act.
Resource Conservation and Recovery Act	40 CFR Part 257	Substantive portions of 40 CFR Part 257 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Criteria for Classification of Waste Disposal Facilities
Resource Conservation and Recovery Act 42 USC s/s 6901 et seq. (1976)  Subtitle C – Wastes	40 CFR Part 261	Substantive portions of 40 CFR Parts 261 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Identification and listing of hazardous waste
Resource Conservation and Recovery Act 42 USC s/s 6901 et seq. (1976)	40 CFR Part 262	Substantive portions of 40 CFR Part 262 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Standards applicable to generators of hazardous waste
Resource Conservation and Recovery Act 42 USC s/s 6901 et seq. (1976)	40 CFR § 262.11	Substantive portions of 40 CFR § 262.11 are potential relevant and appropriate	Hazardous waste determination

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
		action-specific ARARs for purposes of on-site response	
Resource Conservation and Recovery Act, 42 USC s/s 6901 et seq. (1976)	40 CFR Part 262.34	Substantive portions of 40 CFR § 262.34 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Standards for Hazardous Waste Generators, 90-Day Accumulation Rule
Resource Conservation and Recovery Act, 42 USC s/s 6901 et seq. (1976)	40 CFR Part 264 and 265, Subparts B-264.10 - .19 F-264.90 - .101 G-264.110 - .120 J-264.190 - .200 S-264.550 - .555 X-264.600 - .603	Substantive portions of the referenced Subparts of Parts 264 and 265 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Standards for Owners/Operators of Hazardous Waste Treatment, Storage and Disposal Facilities. B- General Facility Standards F- Releases from Solid Waste Management Units G- Closure and Post Closure J- Tank Systems S- Special Provisions for Cleanup X- Miscellaneous Units
Section 3004 of the Resource Conservation and Recovery Act (Solid Waste Disposal Act, as amended), 42 USC § 6924	40 CFR § 264.13(b)	Substantive portions of 40 CFR § 264.13(b) are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Owner or operator of a facility that treats, stores or disposes of hazardous wastes must develop and follow a written waste analysis plan.
Resource Conservation and Recovery Act, 42 USC s/s 6901 et seq.	40 CFR Part 264 and 265, Subparts K-264.220 - .232 L-264.250 - .259	Substantive portions of the referenced Subparts of	Standards for Owners/Operators of Hazardous Waste Treatment, Storage and Disposal Facilities. K- Surface Impounds

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
(1976)	N – 264.300 - .317	Parts 264 and 265 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	L- Waste Piles N- Landfills, Subtitle C
Section 3004 of the Resource Conservation and Recovery Act, as amended, 42 USC § 6924	40 CFR § 264.232	Substantive portions of 40 CFR § 264.232 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Owners and operators shall manage all hazardous waste placed in a surface impoundment in accordance with 40 CFR Subparts BB (Air Emission Standards for Equipment Leaks) and CC (Air Emission Standards for Tanks, Surface Impoundments and Containers).
Resource Conservation and Recovery Act, 42 USC s/s 6901 et seq. (1976)	40 CFR Part 268	Substantive portions of 40 CFR Part 268 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Land disposal restrictions C- Prohibitions on Land Disposal
Toxic Substances Control Act (TSCA), Title 1, 15 USC § 2605	40 CFR Part 761	Substantive portions of 40 CFR Part 761 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Polychlorinated biphenyls (PCBs) manufacturing, processing, distribution in commerce, and use prohibitions
Hazardous Materials Transportation Act, as amended, 49 USC §§	49 CFR Part 170.	Substantive portions of 49 CFR Part 170	Transport of hazardous materials program procedures.

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
5101 – 5127		are potential relevant and appropriate action-specific ARARs for purposes of on-site response	
Hazardous Materials Transportation Act, as amended, 49 USC §§ 5101 – 5127	49 CFR Part 171	Substantive portions of 49 CFR Part 171 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Department of Transportation Rules for Transportation of Hazardous Materials, including procedures for the packaging, labeling, manifesting and transporting of hazardous materials.
Resource Conservation and Recovery Act, 42 USC s/s 6901 et seq. (1976)	62 Fed. Reg. 25997 and 63 Fed. Reg. 65874	Not an action-specific ARAR for purposes of this on-site response	Subtitle C, Phase IV Supplemental Proposal on Land Disposal of Mineral Processing Wastes (62 FR 25997), and Hazard Remediation Waste Management requirements (63 FR 65874)
New York State ECL Article 17, Title 5	—	Substantive portions of 17-0501, 17-0503, 17-0505, 17-0507, 17-0509 and 17-0511 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	It shall be unlawful for any person, directly or indirectly, to throw, drain, run or otherwise discharge into such waters organic or inorganic matter that shall cause or contribute to a condition in contravention of applicable standards identified at 6 NYCRR § 701.1.
New York State ECL Article 11, Title 5	NY ECL § 11-0503	Substantive portions of 11-0503 are potential relevant and appropriate	Fish & Wildlife Law against water pollution. No deleterious or poisonous substances shall be thrown or allowed to run into any public or private waters in quantities injurious to fish life, protected wildlife, or waterfowl



**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
		action-specific ARARs for purposes of on-site response	inhabiting those waters, or injurious to the propagation of fish, protected wildlife, or waterfowl therein.
New York State ECL Article 19, Title 3 - Air Pollution Control Law. Promulgated pursuant to the Federal Clean Air Act, 42 USC § 7401	6 NYCRR Parts 200, 202, 205, 207, 211, 212, 219, and 257.	Substantive portions of 6 NYCRR Parts 200, 202, 205, 207, 211, 212, 219, and 257 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Air Pollution Control Regulations. The emissions of air contaminants that jeopardize human, plant, or animal life, or is ruinous to property, or causes a level of discomfort is strictly prohibited.
New York State ECL Article 27, Title 7	6 NYCRR Part 360	Substantive portions of 6 NYCRR Part 360 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Solid Waste Management Facilities New York State regulations for design, construction, operation, and closure requirements for solid waste management facilities.
New York State ECL Article 27, Title 11	6 NYCRR Part 361	Substantive portions of 6 NYCRR Part 361 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Siting of Industrial Hazardous Waste Facilities establishes criteria for siting industrial hazardous waste treatment, storage and disposal facilities. Regulates the siting of new industrial hazardous waste facilities located wholly or partially within New York State. Identifies criteria by which the facilities siting board will determine whether to approve a proposed industrial hazardous waste facility.
New York State ECL Article 27, Title 3	6 NYCRR Part 364	Substantive portions of 6 NYCRR Part	Standards for Waste Transportation Regulations governing the collection, transport and delivery of regulated

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
		364 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	wastes, including hazardous wastes.
New York State ECL Article 27, Title 9	6 NYCRR Parts 370 and 371	Substantive portions of 6 NYCRR Parts 370 and 371 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	New York State regulations for activities associated with hazardous waste management.
New York State ECL Article 3, Title 3; Article 27, Titles 7 and 9	6 NYCRR Part 372	Substantive portions of 6 NYCRR Part 372 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities. Includes Hazardous Waste Manifest System requirements for generators, transporters, and treatment, storage or disposal facilities, and other requirements applicable to generators and transporters of hazardous waste.
New York State ECL Article 3, Title 3; Article 27, Titles 7 and 9	6 NYCRR Part 373	Substantive portions of 6 NYCRR Part 373 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Hazardous Waste Manifest System and Related Standards for Generators, Transporters and Facilities. Includes Hazardous Waste Manifest System requirements for generators, transporters, and treatment, storage or disposal facilities, and other requirements applicable to generators and transporters of hazardous waste.

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

<b>Medium/Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
New York State ECL Article 27 Title 13	6 NYCRR Part 375	Substantive portions of 6 NYCRR Part 375 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Inactive Hazardous Waste Disposal Sites. Establishes standards for the development and implementation of inactive hazardous waste disposal site remedial programs.
New York State ECL Article 27, Title 9	6 NYCRR Part 376	Substantive portions of 6 NYCRR Part 376 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Land Disposal Restrictions. PCB wastes including dredge spoils containing PCBs greater than 50 ppm must be disposed of in accordance with federal regulations at 40 CFR Part 761.
New York State ECL Article 15, Title 5, and Article 17, Title 3	6 NYCRR Part 608	Substantive portions of 6 NYCRR Part 608 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	Use and Protection of Waters. A permit is required to change, modify, or disturb any protected stream, its bed or banks, or remove from its bed or banks sand or gravel or any other material; or to excavate or place fill in any of the navigable waters of the state. Any applicant for a federal license or permit to conduct any activity which may result in any discharge into navigable waters must obtain a State Water Quality Certification under Section 401 of the Federal Water Pollution Control Act. 33 USC § 1341
New York State ECL, Article 1. Title 1, Article 3 Title 3, Article 15 Title 3, Article 17 Title 1, 3, and 8	6 NYCRR Part 700-706	Substantive portions of 6 NYCRR Parts 701 and 703 are potential relevant and	New York limitations on discharges of sewage, industrial waste or other wastes.

**TABLE C.5**
**ACTION-SPECIFIC POTENTIAL APPLICABLE OR RELEVANT AND  
APPROPRIATE REQUIREMENTS (ARARs) IN THE RI**

Medium/Authority	Citation	Status for FS	Requirement Synopsis
		appropriate action-specific ARARs for purposes of on-site response	
New York State ECL Article 17, Title 8	6 NYCRR Parts 750 – 758	Substantive portions of 6 NYCRR Parts 750 - 758 are potential relevant and appropriate action-specific ARARs for purposes of on-site response	New York State Pollutant Discharge Elimination System (SPDES) Requirements Standards for Storm Water Runoff, Surface Water, and Groundwater Discharges, In general, no person shall discharge or cause a discharge to NY State waters of any pollutant without a permit under the New York State Pollutant Discharge Elimination System (SPDES) program.
Local County or Municipality Pretreatment Requirements	Local regulations	Not an action-specific ARAR for purposes of this on-site response	Local regulations

**TABLE C.6**

**ACTION-SPECIFIC POTENTIAL CRITERIA, ADVISORIES, AND GUIDANCE TO BE  
CONSIDERED (TBC) IN THE RI AND FS**

Medium/ Authority	Citation	Status for FS	Requirement Synopsis
USEPA	Covers for Uncontrolled Hazardous Waste Sites (EPA/540/2-85-002; September 1985)	TBC	Covers for Uncontrolled Hazardous Waste Sites should include a vegetated top cover, middle drainage layer, and low permeability layer.
USEPA	Rules of Thumb for Superfund Remedy Selection (EPA 540-R-97- 013, August 1997)	TBC	Describes key principles and expectations, as well as "best practices" based on program experience for the remedy selection process under Superfund. Major policy areas covered are risk assessment and risk management, developing remedial alternatives, and groundwater response actions.
USEPA	Land Use in the CERCLA Remedy Selection Process (OSWER Directive No. 9355.7-04, May 1995)	TBC	Presents information for considering land use in making remedy selection decisions at NPL sites.
USEPA	Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites (OSWER Directive 9285.6-08, February 2002)	TBC	Presents risk management principles that site managers should consider when making risk management decisions at contaminated sediment sites.
USEPA	Contaminated Sediment Strategy (EPA-823-R-98- 001, April 1998)	TBC	Establishes an Agency-wide strategy for contaminated sediments, with the following four goals: 1) prevent the volume of contaminated sediments from increasing; 2) reduce the volume of existing contaminated sediment; 3) ensure that sediment dredging and dredged material disposal are managed in an environmentally sound manner; and 4) develop scientifically sound sediment management tools for use in pollution prevention, source control, remediation, and dredged material management.
USEPA	Contaminated Sediment Remediation Guidance for Hazardous Waste Sites (OSWER 9355.0-85 draft November 2002)	TBC	Provides technical and policy guidance for addressing contaminated sediment sites nationwide primarily associated with CERCLA actions.
USEPA	Structure and Components of Five-Year Reviews (OSWER Directive 9355.7-02, May 1991)  Supplemental Five-Year Review Guidance (OSWER Directive 9355.7-	TBC	Provides guidance on conducting Five-Year Reviews for sites at which hazardous substances, pollutants, or contaminants remain on-site above levels that allow for unrestricted use and unlimited exposure. The purpose of the Five-Year Review is to evaluate whether the selected response

TABLE C.6

**ACTION-SPECIFIC POTENTIAL CRITERIA, ADVISORIES, AND GUIDANCE TO BE  
CONSIDERED (TBC) IN THE RI AND FS**

Medium/ Authority	Citation	Status for FS	Requirement Synopsis
	02A, July 1994)  Second Supplemental Five-Year Review Guidance (OSWER 9355.7-03A, December 1995)		action continues to be protective of public health and the environment and is functioning as designed:
USEPA	40 CFR Part 50	TBC	Clean Air Act, National Ambient Air Quality Standards
USACE	USACE, Notice on Issuance of Nationwide Permits, 67 Fed. Reg. 2020 (Jan. 15, 2002).	TBC	
DEC	Letter from William R. Adriance, Chief Permit Administrator, to Richard Tomer and Paul G. Leuchner, Chiefs of the New York and Buffalo Districts of USACE, re. <i>Section 401 Water Quality Certification</i> , January 15, 2002 Nationwide Permits (Mar. 15, 2002).	TBC	
DEC	New York Guidelines for Soil Erosion and Sediment Control	TBC	
DEC	Air Guide 1 - Guidelines for the Control of Toxic Ambient Air Contaminants, 2000	TBC	Provides guidance for the control of toxic ambient air contaminants in New York State. Current annual guideline concentrations (AGCs) for PCBs are 0.01 µg/m <sup>3</sup> for inhalation of evaporative congeners (Aroclor 1242 and below) and 0.002 µg/m <sup>3</sup> for inhalation of persistent highly chlorinated congeners (Aroclor 1248 and above) in the form of dust or aerosols.
DEC	Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water	TBC	Provides guidance for ambient water quality standards and guidance values for pollutants
DEC	Technical and Operational Guidance Series (TOGS) 1.2.1 Industrial SPDES Permit Drafting Strategy for Surface Waters	TBC	Provides guidance for writing permits for discharges of wastewater from industrial facilities and for writing requirements equivalent to SPDES permits for discharges from remediation sites.
DEC	Technical and Operational Guidance Series (TOGS) 1.3.1 Waste Assimilative Capacity Analysis & Allocation for Setting	TBC	Provides guidance to water quality control engineers in determining whether discharges to water bodies have a reasonable potential to violate water quality standards and guidance values.

**TABLE C.6**
**ACTION-SPECIFIC POTENTIAL CRITERIA, ADVISORIES, AND GUIDANCE TO BE  
CONSIDERED (TBC) IN THE RI AND FS**

<b>Medium/ Authority</b>	<b>Citation</b>	<b>Status for FS</b>	<b>Requirement Synopsis</b>
DEC	Technical and Operational Guidance Series (TOGS) 1.3.2 Toxicity Testing in the SPDES Permit Program	TBC	Describes the criteria for deciding when toxicity testing will be required in a permit and the procedures which should be followed when including toxicity testing requirements in a permit.
DEC	Technical and Operational Guidance Series (TOGS) 2.1.1, Guidance on Groundwater Contamination Strategy	TBC	
DEC, Division of Environ- mental Remedi- ation	Technical and Administrative Guidance Memorandum (TAGM) 4031 Fugitive Dust Suppression and Particulate Monitoring Program at Inactive Hazardous Waste Sites	TBC	Provides guidance on fugitive dust suppression and particulate monitoring for inactive hazardous waste sites.
DEC	Interim Guidance on Freshwater Navigational Dredging, October 1994	TBC	Provides guidance for navigational dredging activities in freshwater areas.
DEC Division of Fish, Wildlife and Marine Resources	Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (FWIA), October 1994	TBC	Provides rationale and methods for sampling and evaluating impacts of a site on fish and wildlife during the remedial investigation and other stages of the remedial process
DEC TAGM 3028	“Contained-In Criteria for Environmental Media (November 30, 1992).	TBC	Provides “contained-in” concentrations/ action levels for environmental media and the basis for these criteria.

## **SECTION C.3**

### **ARAR AND TBC EVALUATION FOR ONONDAGA LAKE FS**

#### **C.3.1 LITTORAL AREA: (ALTERNATIVE 2) – HABITAT ENHANCEMENT**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the alternative's expected attainment of these ARARs:

#### **On-Site ARARS**

##### **Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

##### **Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.



- o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
- o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); and ECL § 27-1318 (institutional and engineering controls); and Part 608 (use and protection of waters); Part 701 (classifications of surface waters and

groundwaters); 703 (surface water and groundwater quality standards) and Parts 750 – 758 (SPDES program)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.2 LITTORAL AREA: (ALTERNATIVE 3) – ISOLATION CAPPING/HABITAT OPTIMIZATION**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **On-Site ARARS**

#### **Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

**Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (Section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These are designated as relevant and appropriate for substantive, non-permit related portions.

**Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S

(special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL §§ 11-503 (polluting streams prohibited); and 27-1318 (institutional and engineering controls); and 6 NYCRR Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); and 703 (surface water and groundwater quality standards)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.3 LITTORAL AREA: (ALTERNATIVE 4) – DREDGING/ISOLATION CAPPING/HABITAT OPTIMIZATION**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **On-Site ARARS**

#### **Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o State standards in 6 NYCRR Part 703, Table 1 — Chlorobenzenes: 400 µg/L— This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$  — This standard is not applicable but is designated as relevant and appropriate for its substantive, non-permit related portions.

### **Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (Section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water

monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); and ECL § 27-1318 (institutional and engineering controls); and Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); 703 (surface water and groundwater quality standards) and Parts 750 – 758 (SPDES program)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.4 LITTORAL AREA: (ALTERNATIVE 5) – DREDGING**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **On-Site ARARS**

#### **Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in CWA 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f - 300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.



- o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
- o State standards in 6 NYCRR Part 703, Table 1 — Chlorobenzenes: 400 µg/L— This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$  — This standard is not applicable but is designated as relevant and appropriate for its substantive, non-permit related portions.

### **Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions..
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of

waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) )—These are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); and ECL § 27-1318 (institutional and engineering controls); and Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); 703 (surface water and groundwater quality standards) and Parts 750 – 758 (SPDES program)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.5 PROFUNDAL AREA: (ALTERNATIVE 2) – MONITORED NATURAL RECOVERY**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:



**On-Site ARARS****Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

**Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in 40 CFR §§ 257.8 (floodplains) and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

**Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); 264.97 (ground-water monitoring requirements); 264.98 (detection monitoring program); 264.99 (compliance monitoring program); 264.278 (unsaturated zone monitoring), 761.61(a)(8) (deed restrictions for caps, fences and low occupancy areas) )—These

standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL § 27-1318 (institutional and engineering controls)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.6 PROFUNDAL AREA: (ALTERNATIVE 3) – THIN-LAYER CAPPING**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific) ), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **On-Site ARARS**

#### **Chemical-Specific ARARS**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

**Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

**Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S

(special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) ) —These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL §§ 11-503 (polluting streams prohibited); and 27-1318 (institutional and engineering controls); and 6 NYCRR Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); and 703 (surface water and groundwater quality standards)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.7 PROFUNDAL AREA: (ALTERNATIVE 4) – MNR/PHASED THIN-LAYER CAPPING**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific) ), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **On-Site ARARS**

#### **Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

### **Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water

monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL §§ 11-503 (polluting streams prohibited); and 27-1318 (institutional and engineering controls); and 6 NYCRR Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); and 703 (surface water and groundwater quality standards)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.8 PROFUNDAL AREA: (ALTERNATIVE 5) – MNR/AERATION (OXYGENATION)**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific) ), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the alternative's expected attainment of these ARARs:

### **On-Site ARARS**

#### **Chemical-Specific ARARS**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These



water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
- o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

#### **Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in 40 CFR §§ 257.8 (floodplains) and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); 264.97 (ground-water monitoring requirements); 264.98 (detection monitoring program); 264.99 (compliance monitoring program); 264.278 (unsaturated zone monitoring), 761.61(a)(8) (deed restrictions for caps, fences and low occupancy areas)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 27-1318 (institutional and engineering controls)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

**TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

**C.3.9 PROFUNDAL AREA: (ALTERNATIVE 6) – MNR/AERATION  
(OXYGENATION) PHASED THIN-LAYER CAPPING****(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific) ), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

**On-Site ARARS****Chemical-Specific ARARS**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

**Location-Specific ARARS**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6



(National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.

- o Federal standards Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
- o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 761.61(a)(8) (deed restrictions for caps, fences and low occupancy areas)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 27-1318 (institutional and engineering controls)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

**C.3.10 PROFUNDAL AREA: (ALTERNATIVE 7) – ISOLATION CAPPING****(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific) ), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

**On-Site ARARS****Chemical-Specific ARARS**

- This Alternative is expected to attain each of the following:
  - o Federal standards in the 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f -300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1—Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$ —This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

**Location-Specific ARARS**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program);

and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); and 40 CFR § 761.61 (PCB remediation waste)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 27-1318 (institutional and engineering controls)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

### **C.3.11 PROFUNDAL AREA: (ALTERNATIVE 8) – DREDGING**

#### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this

alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **On-Site ARARs**

#### **Chemical-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in CWA 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f - 300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1 — Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$  — This standard is designated as relevant and appropriate for its substantive, non-permit related portions..

#### **Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and

threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 33 CFR Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 61 and 63 (NESHAPs); Part 121, 122, 125, 401 and 403.5 (NPDES); 230 (guidelines for specification of disposal sites for dredged and fill material); 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); and ECL § 27-1318 (institutional and engineering controls); and Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); 703 (surface water and groundwater quality standards) and Parts 750 – 758 (SPDES program)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

**C.3.12 WETLAND AREA: (ALTERNATIVE 2) – SOIL COVER****(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific).

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the alternative's expected attainment of these ARARs:

**On-Site ARARs****Chemical-Specific ARARs**

- There are no chemical-specific ARARs for this Alternative.

**Location-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

**Action-Specific ARARs**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264,



Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o New York standards in N.Y. ECL §§ 11-503 (polluting streams prohibited); and 27-1318 (institutional and engineering controls); and 6 NYCRR Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); and 703 (surface water and groundwater quality standards)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

### **TBCs**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

## **C.3.13 WETLAND AREA: (ALTERNATIVE 3) – SEDIMENT/SOIL REMOVAL/SOIL COVER**

### **(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

### **Chemical-Specific ARARs**

#### **On-Site**

- This Alternative is expected to attain each of the following:
  - o Federal standards in CWA 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f - 300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o State standards in 6 NYCRR Part 703, Table 1 — Chlorobenzenes: 400 µg/L— This surface water quality standard is not applicable but is designated as relevant and appropriate for its substantive, non-permit related portions.
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$  — This standard is designated as relevant and appropriate for its substantive, non-permit related portions.

#### **Off-Site ARARS**

- All Federal, state or local off-site environmental requirements would be applicable.

#### **Location-Specific ARARS**

##### **On-Site**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **Off-Site ARARS**

- All Federal, state or local off-site environmental requirements would be applicable.



**Action-Specific ARARs****On-Site**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste) )—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); and ECL § 27-1318 (institutional and engineering controls); and Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); 703 (surface water and groundwater quality standards) and Parts 750 – 758 (SPDES program)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

**Off-Site ARARs**

- The Federal hazardous waste/hazardous material transport standards in 40 CFR Part 263 (standards applicable to transporters of hazardous waste) and 49 CFR subchapter C (hazardous materials regulations) would be applicable.
- All other Federal, state or local off-site environmental requirements would be applicable.

**TBCs****On-Site and Off-Site**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs).

**C.3.14 WETLAND AREA: (ALTERNATIVE 4) – SEDIMENT/SOIL REMOVAL****(1) Summary of ARAR Determinations**

This Alternative would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of this alternative would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for this Alternative, with designations of the Alternative's expected attainment of these ARARs:

**Chemical-Specific ARARs****On-Site**

- This Alternative is expected to attain each of the following:
  - o Federal standards in CWA 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f - 300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR Part 703, Table 1 — Chlorobenzenes: 400 µg/L—This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions..
- This Alternative may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$  — This standard is not applicable but is designated as relevant and appropriate for its substantive, non-permit related portions.

**Off-Site ARARS**

- All Federal, state or local off-site environmental requirements would be applicable.

**Location-Specific ARARS****On-Site**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.

- o Federal standards in Parts 320 (USACE general regulatory policies), 321 (permits for dams and dikes in navigable waters of the U.S.); 322 (permits for structures or work in or affecting navigable waters of the U.S.); 323 (permits for discharges of dredged or fill material into waters of the U.S.); 328 (definition of waters of U.S.); 329 (definition of navigable waters of the U.S.); 330 (nationwide permit program); and 40 CFR Part 121 (state certification of activities requiring a Federal license or permit); 210 (section 404(b)(1) guidelines for specification of disposal sites for dredged or fill material); 40 CFR Part 230 (guidelines for specification of disposal sites for dredged and fill material) and 40 CFR §§ 257.8 (floodplains); 257.9 (wetlands); and 264.18 (location standards); 761.65 (PCBs storage or disposal); 761.75 (PCBs chemical waste landfills); and 50 CFR Part 17 (endangered and threatened wildlife and plants) )—These standards are designated as relevant and appropriate for substantive, on-permit related portions.
- o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, on-permit related portions.

#### **Off-Site ARARS**

- All Federal, state or local off-site environmental requirements would be applicable.

#### **Action-Specific ARARs**

##### **On-Site**

- This Alternative is expected to attain each of the following:
  - o Federal standards in 40 CFR §§ 257.3-1 (floodplains); 257.3-2 (endangered species); 257.3-3 (surface water); 257.3-4 (ground water); 257.21 – 257.28 (ground-water monitoring and corrective action); Part 261 (identification and listing of hazardous waste); 262 (standards applicable to generators of hazardous waste); Part 264 Subpart B (except 40 CFR § 264.18) (general facility standards); Part 264, Subpart C (preparation and prevention); Part 264, Subpart D (contingency plan and emergency procedures); Part 264, Subpart F (releases from solid waste management units); Part 264, Subpart G (closure and post-closure); Part 264, Subpart L (waste piles); Part 264, Subpart N (landfills); Part 264, Subpart S (special provisions for cleanup); Part 264, Subpart X (miscellaneous units); Part 268 (land disposal regulations); and 40 CFR § 761.61 (PCB remediation waste)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); and ECL § 27-1318 (institutional and engineering controls); and Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); 703 (surface water and groundwater quality standards) and Parts

750 – 758 (SPDES program)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

#### **Off-Site ARARS**

- The Federal hazardous waste/hazardous material transport standards in 40 CFR Part 263 (standards applicable to transporters of hazardous waste) and 49 CFR subchapter C (hazardous materials regulations) would be applicable.
- All other Federal, state or local off-site environmental requirements would be applicable.

#### **TBCs**

##### **On-Site and Off-Site**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

### **C.3.15 WASTEWATER TREATMENT: ALL ALTERNATIVES**

#### **(1) Summary of ARAR Determinations**

These alternatives would comply, as described in the designations below, with all On-Site ARARs (i.e., chemical, location, and action-specific), with the possible exception of the two most stringent surface water criteria for mercury. However, the implementation of these alternatives would result in reductions in the concentrations of mercury that are available to release mercury to the water column.

The following is a summary describing all On-Site ARARs for these alternatives, with designations of the Alternative's expected attainment of these ARARs:

#### **Chemical-Specific ARARs**

##### **On-Site**

- These alternatives are expected to attain each of the following:
  - o Federal standards in CWA 33 USC §§ 1251 – 1387 (CWA); 42 USC §§ 300f - 300j-26 (SDWA); and 40 CFR Part 129 (toxic pollutant effluent standards)—These water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o State standards in 6 NYCRR §§ 701.7 (Class B fresh surface waters); 701.8 (Class C fresh surface waters); and 703.1 (all forms of a substance included)—These surface water quality standards are designated as relevant and appropriate for substantive, non-permit related portions.

- o State standards in 6 NYCRR Part 703, Table 1 — Chlorobenzenes: 400 µg/L— This surface water quality standard is designated as relevant and appropriate for its substantive, non-permit related portions..
- These alternatives may not comply readily with 6 NYCRR Part 703, Table 1 — Mercury:  $7 \times 10^{-4}$  — This standard is not applicable but is designated as relevant and appropriate for its substantive, non-permit related portions.

#### **Off-Site ARARS**

- All Federal, state or local off-site environmental requirements would be applicable.

#### **Location-Specific ARARS**

##### **On-Site**

- These alternatives are expected to attain each of the following:
  - o Federal standards in 16 USC §§ 661 – 667e (Fish and Wildlife Coordination Act); 16 USC §§ 1511 – 1544 (Endangered Species Act); 16 USC §§ 470 – 470w-6 (National Historic Preservation Act); 33 CFR Part 320 (general regulatory policies)—These standards are applicable substantive, non-permit related portions.
  - o Federal standards in 50 CFR Part 17 (endangered and threatened wildlife and plants)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-0535 (endangered and threatened species); 6 NYCRR § 608.11 (mean high water elevations); Part 663 (permit requirements for freshwater wetlands); and Part 664 (freshwater wetlands maps and classifications)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

##### **Off-Site ARARS**

- All Federal, state or local off-site environmental requirements would be applicable.

#### **Action-Specific ARARS**

##### **On-Site**

- These alternatives are expected to attain each of the following:
  - o Federal standards in 40 CFR Part 401 (general provisions of effluent guidelines); and § 403.5 (national pretreatment standards: prohibited discharges)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.
  - o New York standards in N.Y. ECL § 11-503 (polluting streams prohibited); 6 NYCRR Part 608 (use and protection of waters); Part 701 (classifications of surface waters and groundwaters); 703 (surface water and groundwater quality

standards); and Part 750 (SPDES Permits)—These standards are designated as relevant and appropriate for substantive, non-permit related portions.

**Off-Site ARARS**

- All other Federal, state or local off-site environmental requirements would be applicable.

**TBCs**

**On-Site and Off-Site**

The NCP does not require compliance with TBCs or that this consideration should be detailed in the FS. All TBCs considered in connection with this FS are listed in Tables C.2 (chemical-specific TBCs), C.4 (location-specific TBCs) and C.6 (action-specific TBCs.)

**SECTION C.4**
**ARAR RECOMMENDATIONS FOR ONONDAGA LAKE RAAS**
**TABLE C.7**
**SMUs 1 – 7  
 ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
<b>Chemical-Specific ARARs</b>			
<b>BIOTA</b>			
No chemical-specific ARARs	—	—	—
<b>SEDIMENTS</b>			
No chemical-specific ARARs	—	—	—
<b>WATER</b>			
<b>ON-SITE</b>			
<b>Federal (Statute)</b>	<b>33 USC §§ 1251 – 1387</b>	<b>Clean Water Act</b>	<b>ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>
<b>Federal (Statute)</b>	<b>42 USC §§ 300f – 300j-26</b>	<b>Safe Drinking Water Act</b>	<b>ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.4 in this Appendix.</b>
<b>USEPA</b>	<b>40 CFR Part 129</b>	<b>Toxic Pollutant Effluent Standards</b>	<b>ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.5 in this Appendix.</b>
<b>DEC</b>	<b>6 NYCRR § 701.7</b>	<b>Class B Fresh Surface Waters</b>	<b>ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>

<sup>1</sup> For convenience, standards recommended to be applicable or relevant and appropriate ARARs appear in bold in this Table.

**TABLE C.7**
**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

Adopting Authority	Requirement Citation	Requirement Title/Pertinent Provision	ARAR Status
			For a more detailed discussion, see C.2.1.6 and Table C.1 in this Appendix.
DEC	6 NYCRR § 701.8	Class C Fresh Surface Waters	ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.6 and Table C.1 in this Appendix.
DEC	6 NYCRR § 703.1	Substance Form	ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.6 and Table C.1 in this Appendix.
DEC	6 NYCRR Part 703, Table 1	Water Quality Standards—Surface Waters and Groundwater	—
		Chlorobenzenes—400 µg/L	ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate. For a more detailed discussion, see C.2.1.6 and Table C.1 in this Appendix.
		Mercury—7 x 10 <sup>4</sup> µg/L	ON-SITE—CHEMICAL-SPECIFIC: Relevant and appropriate. For a more detailed discussion, see C.2.1.6 and Table C.1 in this Appendix.
Location-Specific ARARs			
ON-SITE			
Federal (Statute)	16 USC §§ 661 – 667e	Fish and Wildlife Coordination Act	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.2.4 in this Appendix.



**TABLE C.7**

**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
Federal (Statute)	16 USC §§ 1531 – 1544	Endangered Species Act	ON-SITE—LOCATION-SPECIFIC: Applicable for substantive, non-permit related portions.
Federal Statute	16 USC §§ 470-470w-6	National Historic Preservation Act	ON-SITE—LOCATION-SPECIFIC: Applicable for substantive, non-permit related portions.
USACE	33 CFR Part 320	General Regulatory Policies	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USACE	33 CFR Part 321	Permits for Dams and Dikes in Navigable Waters of the United States	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USACE	33 CFR Part 322	Permits for Structures or Work in or Affecting Navigable Waters of the United States	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USACE	33 CFR Part 323	Permits for Discharges of Dredged or Fill Material into Waters of the United States	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USACE	33 CFR Part 324	Permits for Ocean Dumping of Dredged Material	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.
USACE	33 CFR Part 325	Processing of Department of Army Permits	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.
USACE	33 CFR Part 326	Enforcement	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.
USACE	33 CFR Part 327	Public Hearings	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.

**TABLE C.7**
**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
USACE	33 CFR Part 328	Definition of Waters of the United States	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USACE	33 CFR Part 329	Definition of Navigable Waters of the United States	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USACE	33 CFR Part 330	Nationwide Permit Program	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USEPA	40 CFR Part 121	State Certification of Activities Requiring A Federal License or Permit	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USEPA	40 CFR Part 230	Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USEPA	40 CFR § 257.8	Floodplains	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 257.9	Wetlands	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 264.18	Location Standards	ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.

**TABLE C.7**

**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
USEPA	40 CFR § 761.65	[PCBs] Storage or Disposal	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>
USEPA	40 CFR § 761.70	[PCBs] Incineration	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.
USEPA	40 CFR § 761.71	[PCBs] High Efficiency Boilers	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.
USEPA	40 CFR § 761.72	[PCBs] Scrap Metal Recovery Ovens and Smelters	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate.
USEPA	40 CFR § 761.75	[PCBs] Chemical Waste Landfills	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>
USFW	50 CFR Part 17	Endangered and Threatened Wildlife and Plants	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>
New York (Statute)	N.Y. ECL §§ 11-0535	[New York] Endangered and Threatened Species	<b>ON-SITE—LOCATION-SPECIFIC: Applicable for substantive, non-permit related portions.</b>
DEC	6 NYCCR § 182.3	Prohibitions	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCCR § 182.6	Endangered Species. Threatened Species and Species of Special Concern	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.

TABLE C.7

SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>

Adopting Authority	Requirement Citation	Requirement Title/Pertinent Provision	ARAR Status
DEC	6 NYCRR § 373-2.2(j)	[TSD] Location Standards	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR § 608.11	Mean High Water Elevations	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.6 in this Appendix.</b>
DEC	6 NYCRR Part 662	Freshwater Wetlands—Interim Permits	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 663	Freshwater Wetlands—Permit Requirements	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.2.7 in this Appendix.</b>
DEC	6 NYCRR Part 664	Freshwater Wetlands Maps and Classifications:	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.2.7 in this Appendix.</b>
DEC	6 NYCRR Part 665	Local Government Implementation of the Freshwater Wetlands Act and Statewide Minimum Land-Use Regulations for Freshwater Wetlands	ON-SITE—LOCATION-SPECIFIC: Not applicable or relevant and appropriate. No local government implementation is to occur on-site as part of this remedial action alternative.
<b>Action-Specific ARARs</b>			
<b>ON-SITE</b>			
USFW	16 USC § 662	Impounding, Diverting, or Controlling Waters	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. No pertinent substantive, non-permit related portions. For a

**TABLE C.7**

**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
			more detailed discussion, see C.2.2.4 in this Appendix.
USACE	33 CFR Part 320	General Regulatory Policies	<b>ON-SITE—ACTION-SPECIFIC:</b> Substantive provisions relevant and appropriate. For a more detailed discussion, see C.2.3.6 in this Appendix.
USACE	33 CFR Part 322	Permits for Structures or Work in or Affecting Navigable Waters of the United States	<b>ON-SITE—ACTION-SPECIFIC:</b> Substantive provisions relevant and appropriate. For a more detailed discussion, see C.2.3.6 in this Appendix.
USACE	33 CFR Part 323	Permits for Discharges of Dredged or Fill Material into Waters of the United States	<b>ON-SITE—ACTION-SPECIFIC:</b> Not applicable or relevant and appropriate. No pertinent substantive, non-permit related portions. For a more detailed discussion, see C.2.3.6 in this Appendix.
USACE	33 CFR Part 329	Definition of Navigable Waters of the United States	<b>ON-SITE—ACTION-SPECIFIC:</b> Substantive provisions relevant and appropriate. For a more detailed discussion, see C.2.3.6 in this Appendix.
USACE	33 CFR Part 330	Nationwide Permits	<b>ON-SITE—ACTION-SPECIFIC:</b> Substantive provisions relevant and appropriate. For a more detailed discussion, see C.2.3.6 in this Appendix.
USEPA	40 CFR Parts 121, 122, 125, 401 and 403.5	NPDES program	<b>ON-SITE—ACTION-SPECIFIC:</b> Substantive provisions relevant and appropriate. For a more detailed discussion, see C.2.3.7 and Table C.5 in this Appendix.
USEPA	40 CFR § 257.3-1	Floodplains	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and

**TABLE C.7**
**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
			appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 257.3-2	Endangered Species	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in FS Appendix.
USEPA	40 CFR § 257.3-3	Surface Water	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 257.3-4	Ground Water	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 257.21 – 257.28	Ground-Water Monitoring and Corrective Action	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR Part 261	Identification and Listing of Hazardous Waste	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 262	Standards Applicable to Generators of Hazardous Waste	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.

**TABLE C.7**
**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
USEPA	40 CFR Part 264, Subpart B, (except 40 CFR § 264.18)	General Facility Standards (except 40 CFR § 264.18)	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 264, Subpart C	Preparation and Prevention	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USEPA	40 CFR Part 264, Subpart D	Contingency Plan and Emergency Procedures	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.
USEPA	40 CFR Part 264, Subpart F	Releases from Solid Waste Management Units	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 264, Subpart G	Closure and Post-Closure	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 264, Subpart L	Waste Piles	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 264, Subpart N	Landfills	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.

**TABLE C.7**
**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
USEPA	40 CFR Part 264, Subpart S	Special Provisions for Cleanup	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 264, Subpart X	Miscellaneous Units	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR Part 265	Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities	<b>ON-SITE—ACTION-SPECIFIC:</b> Not applicable or relevant and appropriate. No pertinent provision is more stringent than the 40 CFR Part 264 requirements.
USEPA	40 CFR Part 268	Land Disposal Restrictions	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.4 in this Appendix.
USEPA	40 CFR § 761.61	PCB Remediation Waste	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.1 in this Appendix.
New York (Statute)	N.Y. ECL § 11-503	Polluting Streams Prohibited	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.17 in this Appendix.
New York (Statute)	N.Y. ECL Art. 17, Title 5	Prohibitions	<b>ON-SITE—ACTION-SPECIFIC:</b> Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.



TABLE C.7

SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>

Adopting Authority	Requirement Citation	Requirement Title/Pertinent Provision	ARAR Status
New York (Statute)	N.Y. ECL 27-1318	Institutional and Engineering Controls	<b>ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>
DEC	6 NYCRR Part 360	Solid Waste Management Facilities	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 361	Siting of Industrial Hazardous Waste Facilities	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 370	Hazardous Waste Management System--General	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 371	Identification and Listing of Hazardous Wastes	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 373	Hazardous Waste Management Facilities	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 375	Inactive Hazardous Waste Disposal Sites	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.
DEC	6 NYCRR Part 376	Land Disposal Restrictions	ON-SITE—ACTION-SPECIFIC: Not applicable or relevant and appropriate. Not more stringent than the corresponding Federal requirement.

**TABLE C.7**
**SMUs 1 – 7  
ARARs FOR LITTORAL ALTERNATIVES<sup>1</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
DEC	6 NYCRR Part 608	Use and Protection of Waters	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.6 in this Appendix.
DEC	6 NYCRR Part 701	Classifications—Surface Waters and Groundwaters	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.6 in this Appendix.
DEC	6 NYCRR Part 703	Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.1.6 in this Appendix.
DEC	6 NYCRR Parts 750 - 758	SPDES Program	ON-SITE—ACTION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.15 in this Appendix.

**TABLE C.8**

**SMU 8  
ARARs FOR PROFUNDAL ALTERNATIVE<sup>2</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
<b>Chemical-Specific ARARs</b>			
<b>BIOTA</b>			
No chemical-specific ARARs	—	—	—
<b>SEDIMENTS</b>			
No chemical-specific ARARs	—	—	—
<b>WATER</b>			
No chemical-specific ARARs	—	—	—
<b>Location-Specific ARARs</b>			
<b>ON-SITE</b>			
<b>Federal (Statute)</b>	<b>16 USC §§ 661 – 667e</b>	<b>Fish and Wildlife Coordination Act</b>	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.2.4 in this Appendix.</b>
<b>Federal (Statute)</b>	<b>16 USC §§ 1531 – 1544</b>	<b>Endangered Species Act</b>	<b>ON-SITE—LOCATION-SPECIFIC: Applicable for substantive, non-permit related portions.</b>
<b>Federal Statute</b>	<b>16 USC §§ 470-470w-6</b>	<b>National Historic Preservation Act</b>	<b>ON-SITE—LOCATION-SPECIFIC: Applicable for substantive, non-permit related portions.</b>
<b>USEPA</b>	<b>40 CFR § 257.8</b>	<b>Floodplains</b>	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.</b>
<b>USFW</b>	<b>50 CFR Part 17</b>	<b>Endangered and Threatened Wildlife and Plants</b>	<b>ON-SITE—LOCATION-SPECIFIC: Relevant and appropriate for substantive, non-permit related portions.</b>

<sup>2</sup> For convenience, standards recommended to be applicable or relevant and appropriate ARARs appear in bold in this Table.

**TABLE C.8**

**SMU 8  
ARARs FOR PROFUNDAL ALTERNATIVE<sup>2</sup>**

<b>Adopting Authority</b>	<b>Requirement Citation</b>	<b>Requirement Title/Pertinent Provision</b>	<b>ARAR Status</b>
New York (Statute)	N.Y. ECL §§ 11-0535	[New York] Endangered and Threatened Species	<b>ON-SITE—LOCATION-SPECIFIC:</b> Applicable for substantive, non-permit related portions.
<b>Action-Specific ARARs</b>			
<b>ON-SITE</b>			
USEPA	40 CFR § 257.3-1	Floodplains	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 257.3-2	Endangered Species	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 257.21 – 257.28	Ground-Water Monitoring and Corrective Action	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.3 in this Appendix.
USEPA	40 CFR § 761.61(a)(8)	PCB Remediation Waste—Deed Restrictions for Caps, Fences and Low occupancy Areas	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions. For a more detailed discussion, see C.2.3.1 in this Appendix.
New York (Statute)	N.Y. ECL 27-1318	Institutional and Engineering Controls	<b>ON-SITE—ACTION-SPECIFIC:</b> Relevant and appropriate for substantive, non-permit related portions.