Appendix H
Applicable or Relevant and Appropriate Requirements

Table H-1
Potential Federal Action-Specific ARARs
Comprehensive Investigation Report and Remedial Alternatives Analysis
Swann Park Site, Baltimore, Maryland

Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Federal Action-Specific ARARs					
Handling and Disposal of Certain Hazardous Wastes					
Remediation, release, and polychlorinated biphenyls (PCBs)	Requirements governing the remediation, release, and disposal of PCBs must be met.	Remediation, release, and disposal of PCBs.	40 CFR 761	Not applicable	PCBs are not contaminants of concern at the Swann Park Site.
Resource Conservation and Recovery Act (RCRA) 42 USC 6901 et seq.*					
Onsite waste generation	Waste generator shall determine if that waste is hazardous waste.	Generator of hazardous waste.	40 CFR 262.10 (a), 262.11	Potentially Applicable	Applicable for any operation where waste is generated. Portions of the extracted material may be characteristic RCRA hazardous waste.
Hazardous waste accumulation	Generator may accumulate waste on-site for 90 days or less or must comply with requirements for operating a storage facility.	Accumulate hazardous waste.	40 CFR 262.34	Potentially Applicable	If waste generated at Swann Park Site is determined to be hazardous, any storage of the hazardous waste will not exceed 90 days. Accumulation of hazardous wastes onsite for longer than 90 days would be subject to the substantive RCRA requirements for storage facilities.
Container storage	Containers of RCRA hazardous waste must be: - Maintained in good condition - Compatible with hazardous waste to be stored. - Closed during storage except to add or remove waste.	Storage of RCRA hazardous waste not meeting small quantity generator criteria held for a temporary period greater that 90 days before treatment, disposal or storage elsewhere, in a container.	40 CFR 264.171, 172, 173	Potentially Applicable	Container storage requirements are applicable only if hazardous wastes are generated during remedial activities and are stored onsite for greater than 90 days.
	Inspect container storage areas weekly for deterioration.	Storage of RCRA hazardous waste not meeting small quantity generator criteria held for a temporary period greater that 90 days before treatment, disposal or storage elsewhere, in a container.	40 CFR 264.174	Potentially Applicable	

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Container storage	Place containers on a sloped, crack-free base, and protect from contact with accumulated liquid. Provide con-attainment system with a capacity of 10 percent of the volume of containers of free liquids. Remove spilled or leaked waste in a timely manner to prevent overflow of the containment system.	Storage of RCRA hazardous waste not meeting small quantity generator criteria held for a temporary period greater that 90 days before treatment, disposal or storage elsewhere, in a container.	40 CFR 264.175(a) and (b)	Potentially Applicable	Container storage requirements are applicable only if hazardous wastes are generated during remedial activities and are stored onsite for greater than 90 days.
	Keep containers of ignitable or reactive waste at least 50 feet from the facility property line		40 CFR 264.176	Potentially Applicable	
	Keep incompatible materials separate. Separate incompatible materials stored near each other by a dike or other barrier.		40 CFR 264.177	Potentially Applicable	
	At closure, remove all hazardous waste and residues from the contain-ment system, and decontaminate or remove all containers, liners.		40 CFR 264.178	Potentially Applicable	
Excavation	Movement of excavated materials to new location and placement in or on land will trigger land disposal restrictions for the excavated waste or closure requirements for the unit in which the waste is being placed	Materials containing RCRA hazardous wastes subject to land disposal restrictions are placed in another unit.	40 CFR 268.40	Potentially Applicable	Applicable to disposal of soil containing land disposal restricted RCRA hazardous waste. The wastes generated from the response action at the Swann Park Site may be RCRA hazardous wastes.
Waste pile	Use single liner and leachate collection system. Waste put into waste pile subject to land disposal restriction regulations.	RCRA hazardous waste, non-containerized accumulation of solid, nonflammable hazardous waste that is used for treatment or storage.	40 CFR 264.251 (except 251(j), 251(e)(11))	Not applicable	
Closure with no postclosure care	General performance standard requires elimination of need for further maintenance and control elimination of postclosure escape of hazardous waste, hazardous constituents, leachate, contaminated run-off, or hazardous waste decomposition products.	Land based unit containing hazardous waste. RCRA hazardous waste placed at site, or placed in another unit. Cleanup to health-based standards that will not require long-term management. Not applicable to material treated, stored, or disposed only before the effective date of the requirements, or if treated in-situ, or consolidated within area of contamination.	40 CFR 264.111	Relevant and appropriate	This requirement may apply to active (in-situ) management of wastes if wastes at Swann Park Site are determined to be RCRA hazardous wastes.

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Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Clean closure	Removal or decontamination of all waste residues, contaminated containment system components contaminated subsoils, and structures and equipment contaminated with waste and leachate, and management of them as hazardous waste.	Surface impoundment, container of tank liners and hazardous waste residues, or contaminated soil (including soil from dredging or soil disturbed in the course of drilling or excavation) returned to land.	40 CFR 264.111 and 264.228 (a, b, e through k, m, o, p, q).	Potentially Applicable	Applicable to excavated subsoils that are determined to be a RCRA hazardous waste.
Use of equipment that contacts hazardous waste with organic concentrations greater than 10 percent by weight	Air emission standards for process vents or equipment leaks.	Equipment that contains or contacts hazardous waste with organic concentrations of at least 10 percent by weight or process vents associated with specified operations the manage hazardous wastes with organic concentrations of at least 10 percent by weight.	40 CFR 264.1030 through 1034 (excluding 1030(c), 1033(j), 1034(c)(2), 1034 (d)(2)); 40 CFR 264.1050 through 1063 (excluding 1015(c), 1050(d), 1057(g)(2), 1061(d), 1063(d)(3)	Not applicable	Organic contaminants of concern are not present at the Swann Park Site.
U.S. Department of Transportation, 49 USC 1802, et seq.*					
Hazardous Materials Transportation	No person shall represent that a container or package is safe unless it meets the requirements of 49 USC 1802, et seq. or represent that a hazardous material is present in a package or motor vehicle if it is not	Interstate carriers transporting hazardous waste and substances by motor vehicle. Transportation of hazardous material under contract with any department of the executive branch of the Federal Government.	49 CFR 171.2(f)	Potentially Applicable	Substantive portions of these requirements would be ARARs for transport of hazardous materials onsite. Offsite transport of hazardous materials must comply with both substantive and administrative requirements.
	No person shall unlawfully alter or deface labels, placards, or descriptions, packages, containers, or motor vehicles used for transportation of hazardous materials.		49 CFR 171.2(g)	Potentially Applicable	

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Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Hazardous Materials Marking, Labeling, and Placarding	Each person who offers hazardous material for transportation or each carrier that transports it shall mark each package, container, and vehicle in the manner required.	Person who offers hazardous material for transportation; carries hazardous material; or packages, labels, or placards hazardous material.	49 CFR 172.300	Potentially Applicable	Substantive portions of these requirements would be ARARs for transport of hazardous materials onsite. Offsite transport of hazardous materials must comply with both substantive and administrative requirements.
	Each person offering non-bulk hazardous materials for transportation shall mark the proper shipping name and identification number (technical name) and consignee's name and address.		49 CFR 172.301	Potentially Applicable	
	Hazardous materials for transportation in bulk packages must be labeled with proper identification (ID) number, specified in 49 CFR 172.101 table, with required size of print. Packages must remain marked until cleaned or refilled with material requiring other marking	Person who offers hazardous material for transportation; carries hazardous material; or packages, labels, or placards hazardous material.	49 CFR 172.302	Potentially Applicable	
	No package marked with a proper shipping name or ID number may be offered for transport or transported unless the package contains the identified hazardous material or its residue.		49 CFR 172.303	Potentially Applicable	Substantive portions of these requirements would be ARARs for transport of hazardous materials onsite. Offsite transport of hazardous materials must comply with both substantive and administrative requirements.
	The marking must be durable, in English, in contrasting colors unobscured, and away from other markings.		49 CFR 172.304	Potentially Applicable	
	Labeling of hazardous material packages shall be as specified in the list.	Person who offers hazardous material for transportation; carries hazardous material; or packages, labels, or placards hazardous material.	49 CFR 172.400	Potentially Applicable	
	Non-bulk combination packages containing liquid hazardous materials must be packed with closures upward, and marked with arrows pointing upward.		49 CFR 172.312	Potentially Applicable	
	Each bulk packaging or transport vehicle containing any quantity of hazardous material must be placarded on each side and each end with the type of placards listed in Tables 1 and 2 of 49 CFR 172.504.		49 CFR 172.504	Potentially Applicable	

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Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Waste Disposal					
On-site re-use of excavated material	Excavated material must meet a 0.87 mg/kg Land Disposal Restriction (LDR) for placement or disposal onsite	Placement or disposal of excavated soil onsite	40 CFR 268.49 and 268.48	Applicable	Is applicable to excavated material that will be placed or disposed onsite
Occupational Safety and Health Administration (OSHA)					
Hazardous waste work	Requirements for hazardous waste workers such as training, persona protective equipment (PPE), and clothing must be met.	Hazardous waste work.	29 CFR 1904, 29 CFR 1910, 29 CFR 1926	Applicable	The remedial action at the Swann Park Site may involve hazardous waste workers; therefore, the requirements of OSHA must be met.

Statutes and policies, and their citations, are provided as headings to identify general categories of potential ARARs for the convenience of the reader. Listing the statutes ar policies does not indicate that EPA considers the entire statutes or policies as potential ARARs; only subtantive requirements of the specific citations are considered potentia ARARs. Specific potential ARARs are addressed in the table below each general heading

ACLS - Alternate concentration limits
APEN - Air Pollution Emission Notice.
ARAR - Applicable or relevant and appropriate requirement
BACT - Best available control technology
BDAT - Best demonstrated available technologies
CAA - Clean Air Act.
CAMU - Correction action management unit
RCRA - Resource Conservation and Recovery Act.
CFR - Code for Federal Regulations.
CWA - Clean Water Act
DOT - U.S. Department of Transportation
EPA - U.S. Environmental Protection Agency
LAER - Lowest achievable emission rate.
MCLs - Maximum contaminant levels.
MCLGs - Maximum contaminant level goals
NAS - Naval Air Station
NAAQS - National Ambient Air Quality Standards (primary and secondary)
NESHAP - National emission standards for hazardous air pollutants
NCP - National Contingency Plan.
NPDES - National Pollutant discharge elimination system.
OSHA - Occupational Safety and Health Administration
PCBs - Polychlorinated Biphenyls
POTW - Publicly owned treatment works
PPE - Personal protective equipment
ppm - Parts per million.
ppmw - Parts per million by weight
RA - Relevant and appropriate.
RACT - Reasonably Available Control Technology
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
SDWA - Safe Drinking Water Act.
SIP - State Implementation Plan
SMCLs - Secondary maximum contaminant levels.
TBC - To be considered.
TSCA - Toxic Substances Control Act
UIC - Underground injection control
USC - United States Code.
USDW - Underground source of drinking water.
VOCs - Volatile Organic Compounds.

Table H-2
Potential State Action-Specific ARARs
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Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
State Action-Specific ARARs					
Transportation, Disposal of Hazardous Waste					
Storage, treatment or disposal, and transportation of hazardous waste	Regulations and procedures for the identifications, listing, transportation, treatment, storage and disposal of hazardous wastes must be met.	Handling of hazardous wastes.	COMAR 26.13.02, COMAR 26.13.04, Annotated Code of Maryland, Environmental Article, Title 7, Hazardous Materials, and Hazardous Subtstances	Applicable	Any hazardous waste found during site remediation will be disposed of according to regulations. Any residues or by-products from treatment systems which are hazardous will be disposed of properly
Solid Waste and Water Supply Regulations					
Well Construction and abandonment	Specifications for well construction and abandonment must be met. Also provides a mechanism to provide the State of Maryland with a database of existing and abandoned wells. Permits are required for construction.	Installation or abandonment of monitoring wells	COMAR 26.04.03 COMAR 26.04.04	Potentially Applicable	
Stormwater Management					
Design and construction	Regulations require the design and construction of a system necessary to control stormwater.	Design and construction	COMAR 26.17.02 COMAR 26.17.02.01 COMAR 26.17.02.03(A&B) COMAR 26.17.02.05(A) COMAR 26.17.02.06 COMAR 26.17.02.08 COMAR 26.17.02.10	Applicable	The remedial action will incorporate measures to control and manage stormwater (i.e. erosion control measures will be implemented.
Erosion and Sediment Control					
Land clearing, grading, and earth disturbances	Regulations require the preparation and implementation of a plan to control erosion and sediment for activities involving land clearing, and grading and earth disturbances. Erosion and sediment control criteria are also established.	Land clearing, grading, and earth disturbances	COMAR 26.17.01 COMAR 26.17.01.04 COMAR 26.17.01.05 COMAR 26.17.01.06 COMAR 26.17.01.07 COMAR 26.17.01.11	Applicable	The remedial action will incorporate the standards required for clearing, grading, and other earth disturbances, including compliance with County and Municipal erosion and sediment control ordinances, and the Commission's erosion and sedimentation control regulations.
Maryland Drinking Water Law					
Actions that affect state drinking water	Ensures that the State has the primary enforcement responsibility for drinking water standards under the Federal Safe Drinking Water Act.	Action causing pollution of drinking water supply	Annotated Code of Maryland, Environment Article, Title 9 - Water, Ice, and Sanitary Facilities, Subtitle 4 - Drinking Water	Not applicable	The aquifer at the Swann Park site cannot be used as drinking water supply
Maryland Tidal Wetlands Dredging and Filling					

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Action	Requirement	Prerequisite	Citation	ARAR Determination	Comments
Dredging and upland disposal of dredged material	Regulations require the preparation and implementation of a plan to perform dredging in State or private tidal wetlands and upland disposal of dredged material.	Dredging and upland disposal of dredged material	COMAR 26.24.03 COMAR 26.24.03.02 COMAR 26.24.03.03 COMAR 26.24.03.04	Not applicable	Remedial actions at the Swann Park Site will not include dredging.
Oil Pollution and Tank Management					
Disposal of oil or other matter containing oil	Provides that oil or other matter containing oil or matter containing oil may not be discharged, dumped, spilled, drained, thrown, or deposited into, near, or in an area likely to pollute the waters of the State (surface and underground waters within the boundaries of the State, including the Chesapeake Bay and its tributaries, and all ponds, lakes, rivers, streams, public ditches, and public drainage systems within the State other than those designed to collect, convey, or dispose of sanitary sewer).	Disposal of oil or other matter containing oil.	COMAR 26.10.01.02, Annotated Code of Maryland, Environmental Article, Title 5, Water Resources.	Not applicable	Oil or oil containing matter are not believed to be present at the Swann Park Site.
Air Quality					
Ambient Air Quality Control	Maintains the degree of purity of air necessary to protect the health, the general welfare, and property of people of the State.	Action that will affect air quality standards.	Annotated Code of Maryland, Environmental Article, Title 2, Ambient Air quality.	Applicable	These regulations are applicable at Swann Park Site in connection with earthwork activities
Visible air emissions	Provides Emission Standards for Visible Air Emissions.	Action resulting in visible air emissions.	COMAR 26.11.06.02 Annotated Code of Maryland, Environmental Article, Title 2, Ambient Air Quality.	Applicable	These regulations are applicable at Swann Park Site in connection with activities that remove/ transport/survey debris and/or excavated materials; disturb the soil during excavation; disturb soil or other exposed surfaces during construction.
Particulate air emissions	Provides General Emission Standards, Prohibitions, and Restrictions for particulates.	Action that will result in the emission of particulates.	COMAR 26.11.06.03 Annotated Code of Maryland, Environmental Article, Title 2, Ambient Air Quality.	Applicable	These regulations are applicable at Swann Park Site in connection with activities that remove/ transport/survey debris and/or excavated materials; disturb the soil during excavation; disturb soil or other exposed surfaces during construction.
Nuisance Control	Prohibits nuisance or air pollution.	Action causing a nuisance or air pollution.	COMAR 26.11.06.08	Applicable	May be applicable for remedial actions at Swann Park Site. Measures will be implemented to mitigate impacts if needed.
Odor Control	May not cause or permit the discharge into the atmosphere of gases, vapors, or odors beyond the property line in such a manner that a nuisance or air pollution is created.	Action causing odors, nuisance, or air pollution.	COMAR 26.11.06.09 Annotated Code of Maryland, Environmental Article, Title 2, Ambient Air Quality.	Not Applicable	Will not be applicable for remedial actions at Swann Park Site. Measures will be
Occupational, Industrial, and Residential Hazards					
Action that will generate noise	Limits set on the levels of noise must be met; these limits are protective of the health, welfare, and property of the people in the State of Maryland. The maximum permitted levels for construction activities may not exceed 90 dBA during the day and 75 dBA during night.	Action that will generate noise.	COMAR 26.02.03.02A (2) and B(2), COMAR 26.02.03.02.03A, Annotated Code of Maryland, Environmental Article, Title 3, Noise Control.	Applicable	During the site remediation work, the maximum allowable noise levels will not be exceeded at Swann Park Site boundaries.

ARAR - Applicable or relevant and appropriate requirement
TAP - Toxic Air Pollutant.
USTs - Underground Storage Tanks.
VOCs - Volatile Organic Compounds.

Table H-3
Potential Federal Location-Specific ARARs
Comprehensive Investigation Report and Remedial Alternatives Analysis
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Location	Requirement	Prerequisite	Citation	Applicability Determination	Comments
Navigation and Navigable Waters					
Navigable waters	Establishes regulations pertaining to activities that affect the navigation of the waters of the United States.	Activities affecting navigable waters.	33 CFR 320-329	Not applicable	Response activities at the Swann Park Site will not affect navigation of the river.
Magnuson Fishery Conservation and Management Act					
Managed Fisheries	Provides for conservation and management of specified fisheries within specified fishery conservation zones (in federal waters).	Presence of managed fisheries in federal waters.	16 USC 1801, et seq.	Potentially Applicable	
Hazardous Waste Control Act (HWCA)					
Within 61 meters (200 feet) of a fault displaced in Holocene time	New treatment, storage or disposal of hazardous waste prohibited.	Resource Conservation and Recovery Act (RCRA) hazardous waste; treatment, storage, or disposal of hazardous waste.	40 CFR 264.18 (a)	Not applicable	The Swann Park Site is not know to be within 61 meters of a fault displaced in Holocene time.
Within 100-year floodplain	Facility must be designed, constructed, operated, and maintained to avoid washout.	RCRA hazardous waste; treatment, storage, or disposal of hazardous waste.	40 CFR 264.18 (b)	Potentially Applicable	The Swann Park Site falls in the 100-year flood zone. This requirement may apply if wastes at Swann Park Site are determined to be hazardous.
Within salt dome formation, underground mine, or cave	Placement of non-containerized or bulk liquid hazardous waste prohibited.	RCRA hazardous waste; placement.	40 CFR 264.18 (c)	Not applicable	
Executive Order 11988, Protection of Floodplains					
Within floodplain	Actions taken should avoid adverse effects, minimize potential harm, restore and preserve natural and beneficial values.	Action that will occur in a floodplain, i.e., lowlands, and relatively flat areas adjoining inland and coastal waters and other flood-prone areas.	40 CFR 6, Appendix A; excluding Sections 6(a)(2), 6(a)(4), 6(a)(6); 40 CFR 6.302	Applicable	The Swann Park Site falls in the 100-year flood zone.
Rivers and Harbors Act of 1972					
Navigable waters	Permits are required for structures or work affecting navigable waters.	Activities affecting navigable waters.	33 USC 403	Not applicable	Response activities at the Swann Park Site will not affect navigation of the river.

ARARs - Applicable or relevant and appropriate requirements.
RCRA - Resource Conservation and Recovery Act.
CFR - Code of Federal Regulations.
CWA- Clean Water Act.
DON - Department of Navy.
EO - Executive Order.
FR - Federal Register.
HWCA - Hazardous Waste Control Act.
NAS - Naval Air Station.
USC - United States Code.
TBC - To Be Considered.

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Location	Requirement	Prerequisite	Citation	Applicability Determination	Comments
Procedures for Implementing the Requirements of the Council on Environmental Quality on the National Environmental Policy Act and Executive Order 11990, Protection of Wetlands					
Wetland	Action to minimize the destruction, loss, or degradation of wetlands. Wetlands of primary ecological significance must not be altered so that ecological systems in the wetlands are unreasonably disturbed.	Wetlands as defined by Executive Order 11990 Section 7.	40 CFR 6, Appendix A excluding Sections 6(a)(2), 6(a)(4), 6(a)(6); 40 CFR 6.302	Not applicable	Wetlands are not present in the vicinity of the Swann Park Site.
Clean Water Act, Section 404					
Wetland	The degradation Section requires degradation or destruction of wetlands and other aquatic sites be avoided to the extent possible. Dredged or fill material must not be discharged to navigable waters if the activity: contributes to the violation of Maryland water quality standards; CWA Sec. 307; jeopardizes endangered or threatened species; or violates requirements of the Title III of the Marine Protection, Research, and Sanctuaries Act of 1972.	Wetland as defined by Executive Order 11990 Section 7.	40 CFR 230.10; 40 CFR 231 (231.1, 231.2, 231.7, 231.8)	Applicable	Navigable waters are present adjacent to the Swann Park Site. Remedial activities will comply with the requirements of this sectior of the Clean Water Act.
Surface Water	Ambient Water Quality Criteria established to protect aquatic life and human consumers of water or aquatic life.	Activities that affect or may affect the surface water onsite	40 CFR 129	Applicable	These regulations were used in the development of the remedial alternative in the form of erosion control measures.
Wild and Scenic Rivers Act					
Within area affecting national wild, scenic, or recreational rivers.	Avoid taking or assisting in action that will have direct adverse effect on national, wild, or scenic recreational rivers.	Activities that affect or may affect any of the rivers specified in Section 1276(a).	16 USC 1271 et seq. and Section 7(a); 36 CFR 297; 40 CFR 6.302 (e)	Not applicable	The Swann Park Site is not known to be on a national, wild, or scenic recreational river
Coastal Zone Management Act					
Within coastal zone	Regulates activities affecting the coastal zone including lands thereunder and adjacent shoreline. The coastal zone is rich in a variety of natural, commercial, recreational, ecological, industrial, and esthetic resources of immediate and potential value to the present and future well-being of the Nation. Must conduct activities in a manner consistent with the approved State management programs.	Activities affecting the coastal zone including lands thereunder and adjacent shoreland.	Section 307(c) of 16 USC 1456(c); 16 USC 1451 et seq.; 15 CFR 930; 15 CFR 923.45	Applicable	
Coastal Barrier Resources Act, Section 3504					
Within designated coastal barrier	Prohibits any new federal expenditure within the Coastal Barrier Resource System. A coastal barrier is defined as habitats providing habitats for migratory birds and other wildlife, habitats which are essential spawning, nursery, nesting, and feeding areas for commercially and recreationally important species of finfish and shellfish, as well as other aquatic organisms such as sea turtles; contain resources of extraordinary scenic, scientific, recreational, natural, historic, archeological, cultural, and economic importance; serve as natural storm protective buffers and are generally unsuitable for development.	Activity within the Coastal Barrier Resource System.	16 USC 3504	Not applicable	The Swann Park Site is not known to be within a designated Coastal Barrier

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Location	Requirement	Prerequisite	Citation	Applicability Determination	Comments
Federal Location-Specific ARARs					
National Archaeological and Historical Preservation Act					
Within area where action may cause irreparable harm, loss, or destruction of significant artifacts.	Construction on previously undisturbed land would require an archaeological survey of the area.	Alteration of terrain that threatens significant scientific, prehistoric, historic, or archaeologic data.	Substantive requirements of 36 CFR 65; 16 USC 469	Not applicable	None of the remedial actions being considered for the Swann Park Site include the disturbance of previously undisturbed land.
Federal National Historic Preservation Act, Section 106					
Historic project owned or controlled by federal agency.	Action to preserve historic properties; planning of action to minimize harm to properties listed on or eligible for listing on the National Register of Historic Places.	Property included in or eligible for the National Register of Historic Places.	Substantive Requirements of 36 CFR 800; 16 USC 470	Not applicable	No historic buildings are located at the Swann Park Site.
Historic Sites, Buildings, and Antiquities Act					
Historic sites	Avoid undesirable impacts on landmarks.	Areas designated as historic sites.	16 USC 461-467; 40 CFR 6.301 (a)	Not applicable	No such structures are present on the Swann Park Site.
Endangered Species Act of 1973					
Critical habitat upon which endangered species or threatened species depend.	Action to conserve endangered species or threatened species, including consultation with the Department of the Interior. Reasonable mitigation and enhancement measures must be taken, including live propagation, transplantation, and habitit acquisition and improvement.	Determination of effect upon endangered or threatened species or its habitat by conducting biological assessments.	16 USC 1531; 16 USC 1536(a); 50 CFR 81, 225, 402	Potentially Applicable	There are no records of endangered plant and animal species located at the Swann Park Site. This regulation is only applicable if the situation changes.
Migratory Bird Treaty Act of 1972					
Migratory bird area	Protects almost all species of native birds in the U.S. from unregulated "take" which can include poisoning at hazardous waste sites.	Presence of migratory birds.	16 USC Section 703	Applicable	
Marine Mammal Protection Act					
Marine mammal area	Protects any marine mammal in the U.S. except as provided by international treaties from unregulated "take."	Presence of marine mammals.	16 USC 1372(2)	Applicable	
Wilderness Act					
Wilderness area	Area must be administered in such a manner as will leave it unimpaired as wilderness and preserve its wilderness character.	Federally-owned area designated as wilderness area.	16 USC 1131 et seq.; 50 CFR 35.1 et seq.	Not applicable	The Swann Park Site is not located in or adjacent to an area designated as part of the National Wildlife Refuge System.
National Wildlife Refuge System					
Wildlife refuge	Only actions allowed under the provisions of 16 USC Section 688 dd(c) may be undertaken in areas that are part of the National Wildlife Refuge System.	Area designated as part of National Wildlife Refuge System.	16 USC 668; 50 CFR 27	Not applicable	The Swann Park Site is not located in or adjacent to an area designated as part of the National Wildlife Refuge System.
Fish and Wildlife Coordination Act, Fish and Wildlife Improvement Act of 1978, Fish and Wildlife Conservation Act of 1980					
Area affecting stream or other water body	Provides protection for actions that would affect streams, wetlands, other water bodies or protected habitats. Any action taken should protect fish or wildlife.	Diversion, channeling or other activity that modifies a stream or other water body and affects fish or wildlife.	16 USC 661; 16 USC 662; 16 USC 742a; 16 USC 2901; 50 CFR 83	Applicable	Response actions will incorporate protection against any area water body, wetlands, or protected habitats.

Table H-4
Potential State Location-Specific ARARs
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Location	Requirement	Prerequisite	Citation	Applicability Determination	Comments
State Location-Specific ARARs					
Threatened and Endangered Species					
Critical habitat upon which endangered species or threatened species depend.	Requires action to conserve endangered or threatened fish species and the critical habitats they depend on. May not reduce the likelihood of either the survival or recovery of a listed species in the wild by reducing the reproduction, numbers or distribution of a listed species or otherwise adversely affect the species.	Determination of effect upon endangered or threatened species or its habitat.	COMAR 08.03.08	Potentially Applicable	
Threatened and Endangered Fish Species					
Critical habitat upon which endangered or threatened fish species depend.	Requires action to conserve endangered or threatened fish species and the critical habitats they depend on.	Determination of effect upon endangered or threatened fish species or its habitat.	COMAR 08.02.12	Potentially Applicable	These regulations are applicable if remedial actions may jeopardize endangered or threatened fish species.
Fish and Fisheries					
Fisheries, locations where species of fish exist	Requirements to conserve species of fish for human enjoyment, for scientific purposes and to ensure their perpetuation as viable components of their ecosystems.	Determination of effect upon fish species or its habitat.	Annotated Code of Maryland, *Natural Resource Article*, Title 4 - Fish and Fisheries	Applicable	Fish species inhabit the Middle Branch Patapsco River. If remedial actions may affect these species the requirements of this title are applicable.
Wildlife					
Areas inhabited by wildlife	Requirements to conserve species of wildlife for human enjoyment, for scientific purposes and to ensure their perpetuation as viable components of their ecosystems.	Determination of effect upon wildlife species or its habitat.	Annotated Code of Maryland, *Natural Resource Article*, Title 10 - Wildlife	Applicable	Wildlife species are present at Swann park. If future remedial actions may affect these species the requirements of this title are applicable.
Chesapeake Bay Critical Protection Law					
Area 1,000 feet landward from tidal waters of the Chesapeake Bay and its tributaries and land under these waters	Minimize impacts of the Bay water quality and to conserve plant, fish, and wildlife habitat.	Activities that will occur in the area 1,000 feet landward from tidal waters of the Chesapeake Bay and its tributaries and land under these waters.	Annotated Code of Maryland, *Natural Resource Article*, Title 8 - Waters, Subtitle 18 - Chesapeake Bay Area Critical Protection Program	Applicable	Swann Park is within the Chesapeake Bay Critical Area - as such all land distrurbing activities are guided by specific provisions in the State adopted critical area criteria and local critical area program.
Nontidal Wetlands Protection Act, Maryland Nontidal Wetlands Regulations					
Wetland	Provides regulations for activities on or near nontidal wetlands (an area that is inundated or saturated by surface water or ground water at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions). Must obtain a permit from the State in order to conduct certain regulated activities in a nontidal wetland, or within a buffer or an expanded buffer.	Activities that will occur on or near nontidal wetlands.	COMAR 26.23; Annotated Code of Maryland, *Environmental Article*, Title 5 - Water Resources	Not applicable	Nontidal wetlands are not present at Swann Park Site.

Table H-4
Potential State Location-Specific ARARs
Comprehensive Investigation Report and Remedial Alternatives Analysis
Swann Park Site, Baltimore, Maryland

Location	Requirement	Prerequisite	Citation	Applicability Determination	Comments
Maryland Wetland Law, Wetlands Tidal Wetlands Regulations					
Tidal Wetland	Tidal wetlands are State and private tidal wetlands, marshes, submerged aquatic vegetation, lands, and open water affected by the daily and periodic rise and fall of the tide within the Chesapeake Bay and its tributaries, the coastal bays adjacent to Maryland's coastal barrier islands, and the Atlantic Ocean to a distance of 3 miles offshore of the low water mark. Provides that activities such as dredging, filling, removing, constructing, reconstruction, or activities otherwise altering tidal wetlands must be permitted by the State.	Activities that will alter tidal wetlands.	COMAR 26.24; Annotated Code of Maryland, *Environmental Article*, Title 5 - Water Resources; Annotated Code of Maryland, *Environmental Article*, Title 16 - Wetlands and Riparian Rights	Not applicable	Tidal wetlands are not present at Swann Park Site.
Wetlands and Riparian Rights					
Wetlands	Requirements to preserve wetlands and prevent their destruction; requires a license for dredging or filling of wetlands.	Activities that can affect the integrity of wetlands, such as dredging or filling.	Annotated Code of Maryland, *Environmental Article*, Title 16 - Wetlands and Riparian Rights	Not applicable	Wetlands (tidal and nontidal) are not present at Swann Park Site.
Construction on Nontidal Waters and Floodplains					
Nontidal waters and floodplains	Protect and maintain nontidal waterways and/or state of Maryland floodplains must follow these regulations	Activities that affect nontidal waterways and floodplains	COMAR 26.17.04	Applicable	Any remedial actions involving alteration to the floodplains are subject to these requirements.
Maryland Water Pollution Control Regulations					
Surface waters of the State	Protect and maintain the quality of surface water in the State of Maryland. Criteria and standards for discharges limitations and policy for antidegradation of the State's limitations and policy for antidegradation of the State's surface water.	Activities that will pollute the surface waters of the state.	COMAR 26.08, Chapters 01-07	Applicable	This regulation is applicable for remedial actions that may affect surface water quality in the State of Maryland. Actions will be taken to mitigate the effect of the remedial action upon surface waters at Patapsco River (i.e. erosion control measures).
Water Management					
Water resources of the State	Provides for the conservation and protection of the water resources of the State by requiring that any land-clearing, grading, or other earth disturbances require an erosion and sediment control plan. Also provides that stormwater must be managed to prevent off-site sedimentation and maintain current site conditions.	Activities that affect the water resources of the State.	COMAR 26.17.01 COMAR 26.17.02, Annotated Code of Maryland, *Environment Article*, Title 4 - Water Management	Applicable	The design for the remedial actions will incorporate the requirements of this regulation.

ARARs - Applicable or relevant and appropriate requirements.
RCRA - Resource Conservation and Recovery Act.
CFR - Code of Federal Regulations.
CWA- Clean Water Act.
DON - Department of Navy.
EO - Executive Order.
FR - Federal Register.
HWCA - Hazardous Waste Control Act.
NAS - Naval Air Station.
USC - United States Code.
TBC - To Be Considered.

Table H-5
Potential Chemical-Specific ARARs
Comprehensive Investigation Report and Remedial Alternatives Analysis
Swann Park Site, Baltimore, Maryland

Chemicals & Relevant Media	Requirement	Prerequisites	Citation	ARAR or TBC	Comments
Groundwater, residential water supplies	Meet National Primary Drinking Water Standards for maximum contaminant levels (MCLs).	Drinking water source or potential potable source	Safe Drinking Water Act (SDWA): 40 CFR 141 National Primary Drinking Water Regulations, CERCLA, RCRA	Applicable	Regulation does not apply where groundwater quality has a concentration of total dissolved solids greater than 2,500 mg/L.
Surface waters of the State	Protect and maintain the quality of surface water in the State of Maryland. Criteria and standards for discharges. Limitations and policy for antidegradation of the State's surface water.	Activities that will pollute the State's surface waters	COMAR 26.08, Chapters 1 through 7	Applicable	This regulation is applicable for remedial actions that may affect the surface water quality in the State of Maryland.
Surface Water	Ambient Water Quality Criteria established to protect aquatic life and human consumers of water or aquatic life.	Activities that affect or may affect the surface water	40 CFR 131	Applicable	
Groundwater and Surface water	Provides for the regulation of water supply, sewerage and refuse disposal. Provides for the adoption of water quality standards. Prohibits discharge of pollutants into waters of the State.	Water pollution control as implemented by COMAR 26.08	State of Maryland Annotated Code - Title 9	Applicable	
Soil and groundwater contamination	Provides guidance on cleanup standards for soil and groundwater under residential and non-residential scenarios. Provides guidance for development of site-specific risk assessment and determination of site-specific cleanup standards in lieu of default cleanup standards. Provides methodology for field screening to attain cleanup standards.	Potential exposure to soil and groundwater	State of Maryland Department of the Environment Cleanup Standards for Soil and Groundwater (August 2001). COMAR 26.14.02.06(E)(2), cleanup standards under the Maryland Hazardous Substance Response Plan. Annotated Code of Maryland, Environment Article, 7-508(b), criteria to protect human health and the environment. Annotated Code of Maryland, Environment Article, 7-208(e), standards for controlled hazardous substances	TBC	

Table H-5
Potential Chemical-Specific ARARs
Comprehensive Investigation Report and Remedial Alternatives Analysis
Swann Park Site, Baltimore, Maryland

Chemicals & Relevant Media	Requirement	Prerequisites	Citation	ARAR or TBC	Comments
Soil as a source of groundwater contamination	Regulated substances are not to exceed the soil-to-groundwater pathway numeric value throughout the soil column.	Potential exposure to groundwater	CERCLA, EPA Region III RBC tables, and EPA soil- screening guidance (EPA/540/R-94/101)	TBC	
Carcinogens in groundwater and in surface water	Not to exceed media-specific concentration that causes a lifetime carcinogenic risk of between 1 in 10,000 and 1 in 100,000	Potential exposure	NCP	TBC	
Systemic toxicants in groundwater and in surface water	Not to exceed media-specific levels where people could be exposed by direct ingestion or inhalation on a daily basis without appreciable risk of deleterious effects.	Potential exposure	NCP	TBC	
Air Quality	Provides ambient air quality standards general emissions standards and restrictions for air emissions from construction activities, vents and treatment technologies	Any activities on property that result in the emission of fluoride, particulate matter, sulfur oxide, carbon monoxide, ozone, nitrogen dixide and lead	COMAR 26.11.04 (for fluoride) and 40 CFR 50	Applicable	Construction activities will emit particulate matter into the ambient air.

ARAR - Applicable or relevant and appropriate requirement
RCRA - Resource Conservation and Recovery Act
CFR - Code for Federal Regulations
CWA - Clean Water Act
EPA - U.S. Environmental Protection Agency
OSHA - Occupational Safety and Health Administration
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
PRGs - Preliminary Remediation Goals
SDWA - Safe Drinking Water Act
SMCLs - Secondary Maximum Contaminant Levels
TBC - To Be Considered