# CHAPTER 5 APPLICABLE LAWS, REGULATIONS, AND OTHER REQUIREMENTS

## 5.0 APPLICABLE LAWS, REGULATIONS, AND OTHER REQUIREMENTS

Decommissioning and/or long-term stewardship of the Western New York Nuclear Service Center must be implemented in a manner that ensures the protection of public health, safety, and the environment through compliance with all applicable Federal, State, and local laws, regulations, Orders, and other requirements or policies. This chapter identifies those Federal, State, and local laws, regulations, Orders, and requirements or policies relevant to this *Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center.* 

#### 5.1 Background

The alternatives analyzed in this Final Environmental Impact Statement for Decommissioning and/or Long-Term Stewardship at the West Valley Demonstration Project and Western New York Nuclear Service Center (Decommissioning and/or Long-Term Stewardship EIS) are described in Chapter 2. To provide a general context to the regulatory requirements discussed in this chapter, the types of activities involved in the implementation of the environmental impact statement (EIS) alternatives are restated here, including the operation of existing facilities; construction and operation of new facilities; closure, decommissioning, and dismantlement of facilities; rehabilitation of facility sites; management, transportation, and disposal of radioactive, hazardous, and mixed wastes; and long-term stewardship of remaining facilities.

The requirements that establish the cleanup and decommissioning criteria for the Western New York Nuclear Service Center (WNYNSC) are embodied in Federal and New York State environmental, safety, and health regulations and Orders promulgated under various statutory authorities. Generally, compliance with these criteria can be measured against established numerical standards or values for radioactive or hazardous constituents in the environment. These often require a permit, license, or approval. Section 5.7 summarizes in tabular form a listing of the potentially applicable laws, regulations, and Orders discussed.

Section 5.2 identifies the applicable Federal environmental, safety, and health laws, regulations, and requirements for WNYNSC. Section 5.3 discusses major applicable Executive Orders. Section 5.4 identifies the applicable U.S. Department of Energy (DOE) regulations and Orders. Section 5.5 discusses the New York State laws, regulations, agreements, and requirements that are applicable to the West Valley Demonstration Project (WVDP) decommissioning and State-Licensed Disposal Area (SDA) management activities. Section 5.6 discusses consultations with agencies and federally recognized American Indian Nations. These regulatory requirements address issues such as protection of public health and the environment, worker safety, historic and cultural resources, and emergency planning.

#### 5.2 Federal Environmental, Safety, and Health Laws, Regulations, and Requirements

The regulations applicable to WNYNSC (including WVDP) encompass a broad range of Federal and state laws, requirements, Executive Orders, and agreements addressing cultural, environmental, health and safety, transportation, and other issues. Generally, these regulations are relevant to how the work involved in performing a proposed action would be conducted to protect workers, the public, and cultural and environmental resources. Some of these require permits or consultation with other agencies or governing bodies. The status of required consultations is discussed in Section 5.6 and correspondence related to those consultations is presented in Appendix O. The Federal laws applicable to WNYNSC decommissioning and long-term stewardship are identified and briefly discussed in this section, and are presented in alphabetical

order by Federal act. More detail is provided for the requirements, such as the NRC License Termination Rule, that are specific to or have unique provisions that apply to WNYNSC or WVDP.

American Indian Religious Freedom Act of 1978 (42 United States Code [U.S.C.] 1996)—The American Indian Religious Freedom Act protects American Indians' rights of freedom to believe, express, and exercise traditional religions. DOE and the New York State Energy Research and Development Authority (NYSERDA) have communicated with the Seneca Nation of Indians to determine if there are artifacts, traditional burial grounds, or sacred areas that could be affected by completing WVDP.

Antiquities Act of 1906, as amended (16 U.S.C. 431 et seq.)—The Antiquities Act protects historic and prehistoric ruins, monuments, and antiquities, including paleontological resources, on federally controlled lands from appropriation, excavation, injury, and destruction without permission.

Archaeological and Historic Preservation Act of 1960, as amended (16 U.S.C. 469 et seq.)—The Archaeological and Historic Preservation Act establishes procedures for preserving historical and archaeological resources. While it is unlikely that cultural or archaeological resources would be discovered under any alternative, erosion control strategies could disturb areas along streambanks, which have a higher potential to contain culturally significant resources. Analysis of environmental compliance included assessing the EIS alternatives for possible impacts on prehistoric, historic, and traditional cultural resources.

Archaeological Resources Protection Act of 1979, as amended (16 U.S.C. 470aa *et seq.*)—The Archaeological Resources Protection Act requires a permit for any excavation or removal of archaeological resources from Federal or American Indian lands. Excavations must be undertaken for the purpose of furthering archaeological knowledge in the public interest, and resources removed are to remain the property of the United States. Consent must be obtained from the American Indian Tribe or the Federal agency that has authority over the land on which a resource is located before issuance of a permit. The permit must contain terms and conditions requested by the Tribe or Federal agency.

**Atomic Energy Act of 1954 (42 U.S.C. 2011** *et seq.*)—The 1954 Atomic Energy Act, as amended, provides fundamental jurisdictional authority to DOE and the U.S. Nuclear Regulatory Commission (NRC) over Governmental and commercial use of nuclear materials, respectively. It authorizes DOE to establish standards to protect health or minimize dangers to life or property for activities under DOE's jurisdiction. It gives the NRC responsibility for licensing and regulating commercial uses of atomic energy and allows that agency to establish dose and concentration limits for protection of workers and the public for activities under its jurisdiction.

DOE implements its responsibilities under the Atomic Energy Act through regulations (set forth in Title 10, Chapter II, of the *Code of Federal Regulations* (CFR) and enumerated as applicable in Table 5–1 (see Section 5.7) and through its series of Orders and associated standards and guidance (see Table 5–2 in Section 5.7). DOE Orders for worker and public radiation protection, environmental safety and health, security, and sound management would be applicable to WVDP activities conducted by DOE under all the alternatives analyzed in this EIS.

NRC licensing and radiation protection, environmental safety and health, security, and management policies are applicable to activities conducted by NYSERDA for facilities at WNYNSC that are under the 10 CFR Part 50 license but outside the authority of the WVDP Act. These and other NRC regulations are codified under Title 10, Chapter I, of the CFR and are enumerated as applicable in Table 5–1. NYSERDA's NRC license for WNYNSC will become a factor when WVDP is completed. The technical specifications and certain other portions of NYSERDA's NRC license are currently in abeyance pending completion of WVDP.

Nuclear Regulatory Commission License Termination Rule (10 CFR Part 20, Subpart E)—The Atomic Energy Act of 1954 assigned the NRC responsibility for licensing and regulating commercial uses of atomic energy. The NRC (and its predecessor, the Atomic Energy Commission) fulfilled this responsibility at WNYNSC by licensing the facility from 1966 to 1981, when the license was suspended to execute the 1980 WVDP Act. Although the NRC suspended the technical specifications and certain other portions of the license pending completion of WVDP, the agency maintained certain authorities under the WVDP Act that included prescribing decommissioning criteria for tanks where the high-level radioactive waste solidified under the project was stored, as well as the facilities, materials, and hardware used in solidification activities. In support of determining the decommissioning criteria for WVDP, the NRC published a draft policy statement for public comment in December 1999 (64 Federal Register [FR] 67952). After considering public comment, the NRC issued a final policy statement in February 2002 prescribing the use of the NRC's License Termination Rule as the decommissioning criteria for WVDP (67 FR 5003). (See the following discussion for more detail on the NRC final decommissioning policy statement.) NYSERDA's NRC license for WNYNSC will become a factor when DOE has completed its obligations under the WVDP Act. At that time, the license could be reinstated or terminated, depending on the alternative selected.

The License Termination Rule does not apply a single public dose criterion for meeting license termination requirements. Rather it provides for a range of criteria. The License Termination Rule specifies that a site will be considered acceptable for unrestricted use if the residual radioactivity that is distinguishable from background radiation results in a total effective dose equivalent (TEDE) to the average member of the critical group that does not exceed 25 millirem per year, including that from groundwater sources of drinking water, and the residual radioactivity has been reduced to levels that are as low as is reasonably achievable (ALARA). The License Termination Rule goes on to specify that a site will be acceptable for license termination under restricted conditions if the licensee has made provisions for legally enforceable institutional controls that provide reasonable assurance that the TEDE from residual radioactivity distinguishable from background levels to the average member of the critical group will not exceed 25 millirem per year. Even if institutional controls were to fail, the TEDE to an individual should not exceed 100 millirem per year. If it is demonstrated that the 100-millirem-per-year TEDE criterion is technically not achievable or is prohibitively expensive in the event of failure of institutional controls, the individual TEDE criterion may be as high as 500 millirem per year. However, in circumstances where restricted release is required, if the 100-millirem-per-year TEDE criterion is exceeded and/or the use of alternate criteria has been determined, the area would be rechecked by a responsible government entity no less frequently than every 5 years. Resources would have to be set aside to provide for any necessary control and maintenance of the institutional controls. Finally, the License Termination Rule permits alternative individual TEDE criteria of up to 100 millirem per year plus ALARA considerations for restricted release, with institutional controls established after a public participation process. Compliance with the dose criterion involves assessment of the total dose to a receptor from all of the NRC-regulated facilities.

License termination procedures for the closure or long-term management of facilities at WNYNSC would be established under NRC operating license CSF-1. Currently the technical specifications and certain other portions of NYSERDA's license are in abeyance pending completion of WVDP.

The Atomic Energy Act is also the statutory basis for the U.S. Environmental Protection Agency (EPA) to set environmental radiation protection standards (i.e., 40 CFR Part 191) generally applicable to the management of high-level radioactive waste and transuranic waste activities at WNYNSC. The Atomic Energy Act authorizes the NRC to enter into an agreement with a state in which the NRC will discontinue and the state will assume regulatory authority over certain radioactive materials. The New York State Department of Health (NYSDOH) and the New York State Department of Environmental Conservation (NYSDEC) have established regulatory

authority under the Agreement State Program for some site activities. The specific activities are discussed in more detail in Section 5.5.

Clean Air Act of 1970, as amended (42 U.S.C. 7401 et seq.)—The Clean Air Act is intended to "protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population." Section 118 of the Clean Air Act requires each Federal agency with jurisdiction over properties or facilities engaged in any activity that might result in the discharge of air pollutants to comply with all Federal, state, interstate, and local requirements with regard to the control and abatement of air pollution. Section 109 of the Clean Air Act directs EPA to set National Ambient Air Quality Standards for the following criteria pollutants. EPA has identified and set National Ambient Air Quality Standards for the following criteria pollutants: particulate matter, sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, and lead. Section 111 of the Clean Air Act requires establishment of national performance standards for new or modified stationary sources of atmospheric pollutants. Section 160 of the Clean Air Act requires that specific emission increases must be evaluated prior to permit approval to prevent significant deterioration of air quality. Section 112 requires specific standards for release of hazardous air pollutants (including radionuclides). Emissions of air pollutants are regulated by EPA in 40 CFR Parts 50 to 99.

EPA regulations at Subpart H of 40 CFR Part 61 and 40 CFR Part 63 require DOE to notify and obtain needed approvals before constructing a new source of radionuclide or hazardous emissions, respectively. The standards also apply to closure and decommissioning activities, such as demolition or excavation, that result in fugitive emissions of radionuclides into unrestricted (public access) areas. If there are any radioactive emissions to the air from facilities remaining after decommissioning WVDP is completed, these emissions would contribute to the dose "from all sources" used to determine compliance with decommissioning criteria.

The Clean Air Act requirements for nonradioactive constituents are enforced in New York State through the NYSDEC Division of Air Resources. The Clean Air Act requirements for radioactive emissions are enforced in New York State through EPA.

Clean Water Act (33 U.S.C. 1251 et seq.)—The Clean Water Act (formerly the Federal Water Pollution Control Act) was enacted to "restore and maintain the chemical, physical, and biological integrity of the Nation's water." The act requires all branches of the Federal Government with jurisdiction over properties or facilities engaged in any activity that might result in a discharge or runoff of pollutants to surface waters to comply with Federal, state, interstate, and local requirements. Decommissioning activities would need to comply with Clean Water Act regulations relevant to wastewater, stormwater, and wetlands.

The Clean Water Act imposes limitations on wastewater and stormwater pollutant discharges through the National Pollutant Discharge Elimination System (NPDES) permitting program. NYSDEC assumed primary NPDES enforcement authority from EPA under the State Pollutant Discharge Elimination System (SPDES). See Section 5.5 for more detail.

WNYNSC contains wetlands that could be affected by decommissioning activities. Both Federal and New York State permits would be required if an activity could disturb or destroy a wetland area. If any decommissioning actions affect the floodplains of Franks and Buttermilk Creeks or certain biota dwelling in these habitats, these actions also would be subject to regulation.

The U.S. Army Corps of Engineers is the lead Federal agency for enforcement of Clean Water Act wetland requirements (33 CFR Part 320). Under Section 401 of the Clean Water Act, New York State has the authority to review and approve with or without conditions, or deny all Federal permits or licenses that might result in a discharge to state waters, including wetlands.

A Section 404 permit would need to be obtained from the U.S. Army Corps of Engineers before implementing any action, such as earthmoving activities and certain erosion controls that could disturb wetlands. Before a Federal activity can be permitted or authorized, New York State must issue a Section 401 Water Quality Certificate, certifying that the proposed activity would not violate water quality standards, and that it complies with other appropriate requirements of New York State law. The Federal and state permits and certification are obtained using the same form, and permit applications for activities affecting waterways and wetlands are reviewed by the U.S. Army Corps of Engineers in consultation with the U.S. Fish and Wildlife Service, the Soil Conservation Service, EPA, and NYSDEC.

Comprehensive Environmental Response, Compensation, and Liability Act, as amended by the Superfund Amendments and Reauthorization Act (42 U.S.C. 9601 et seq.)—The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) includes an emergency response program to respond to a release of a hazardous substance to the environment. Under CERCLA, EPA would have the authority to regulate hazardous substances at WNYNSC in the event of a release or a "substantial threat of a release" of those materials. Releases greater than reportable quantities would be reported to the National Response Center. Assessment of alternatives for environmental compliance includes consideration of whether hazardous substances in reportable quantity amounts could be present at the site during decommissioning.

EPA, as a cooperating agency, will review the cleanup plan, EIS, and other documents developed by DOE in conjunction with NYSERDA to provide early input so the remediated site would also meet the CERCLA risk range of 10<sup>-4</sup> to 10<sup>-6</sup> for excess lifetime cancer risk. Additionally, in 2002 and in keeping with its authority under CERCLA, EPA entered into a Memorandum of Understanding with NRC establishing a framework for their relationship on the radiological decommissioning and decontamination of NRC-licensed sites. The Memorandum of Understanding is discussed in more detail in the following paragraph.

#### NRC and EPA Memorandum of Understanding

The NRC and EPA signed a Memorandum of Understanding establishing a framework for their relationship in the radiological decommissioning and decontamination of NRC-licensed sites. The Memorandum of Understanding provides that EPA will defer exercise of its authority under CERCLA for facilities decommissioned under NRC authority. The Memorandum of Understanding includes provisions for NRC and EPA consultation at particular sites when, at the time of license termination (1) groundwater contamination exceeds EPA maximum contaminant levels, (2) NRC contemplates use of either the restricted release or alternate criteria for license termination options, and/or (3) residual radioactive soil concentrations exist that exceed levels defined in the Memorandum of Understanding (67 FR 65375; October 24, 2002).

Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C. 11001 et seq.) (also known as SARA Title III)—This act requires emergency planning and notice to communities and government agencies concerning the presence and release of specific chemicals. EPA implements this act under regulations found in 40 CFR Parts 355, 370, and 372. Under Subtitle A of this act, Federal facilities are required to provide information (such as inventories of specific chemicals used or stored and releases that occur from these sites) to the State Emergency Response Commission and to the local emergency planning committee to ensure that emergency plans are sufficient to respond to unplanned releases of hazardous substances. Implementation of the provisions of this act began voluntarily in 1987, and inventory and annual emissions reporting began in 1988. DOE requires compliance with SARA Title III as a matter of DOE policy at its contractor-operated facilities.

**Endangered Species Act of 1973 (16 U.S.C. 1531–1544)**—The Endangered Species Act of 1973 requires Federal agencies to consult with the U.S. Fish and Wildlife Service to ensure that actions do not jeopardize threatened or endangered species or result in the destruction or adverse modification of critical habitat.

**Farmland Protection Act of 1981, as amended (7 U.S.C. 4201** *et seq.*; **7 CFR Part 658)**—The Farmland Protection Act requires the avoidance of any adverse effects on prime and unique farmlands. Its purpose is to minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses and to ensure that Federal programs are administered in a manner that, to the extent practical, will be compatible with state and local government and private programs and policies to protect farmland.

Federal Facility Compliance Act of 1992 (42 U.S.C. 6961 et seq.)—The Federal Facility Compliance Act enacted on October 6, 1992, amended the Resource Conservation and Recovery Act (RCRA) to eliminate sovereign immunity for Federal facilities managing mixed waste. For mixed waste, the Federal Facility Compliance Act requires a DOE facility to prepare a site treatment plan that establishes treatment schedules, with annual plan updates to account for development of treatment technologies, capacities, and changes in mixed waste inventories. DOE and NYSDEC entered into a Consent Order in August 1996 that requires completion of the milestones identified in the WVDP site treatment plan. Mixed wastes generated or managed during decommissioning must be handled in accordance with the site treatment plan. For example, mixed waste handling and management at the proposed Container Management Facility would have to conform to Federal Facility Compliance Act requirements, including documentation and accountability of the amounts and characteristics of wastes before and after processing in the facility.

**Federal Insecticide, Fungicide, and Rodenticide Act of 1947, as amended (7 U.S.C. 136** *et seq.*)—The Federal Insecticide, Fungicide, and Rodenticide Act regulates the use, registration, and disposal of several classes of pesticides to ensure that pesticides are applied in a manner that protects the applicators, workers, and environment. Implementing regulations include recommended procedures for the disposal and storage of pesticides (40 CFR Part 165; 71 FR 47330, August 16, 2006, Final Rule) and worker protection standards (40 CFR Part 170).

**Fish and Wildlife Coordination Act of 1934, as amended (16 U.S.C. 661–666e)**—The Fish and Wildlife Coordination Act requires Federal agencies to consult with the U.S. Fish and Wildlife Service and the head of the state agency that administers wildlife resources in the affected state before performing any activity involving the impoundment, diversion, deepening, control, or modification of a stream or body of water. The agency would then produce a Fish and Wildlife Coordination Act report.

Hazardous Materials Transportation Act of 1975, as amended (49 U.S.C. 1801 et seq.)—The Hazardous Materials Transportation Act, as amended, is the major Federal transportation-related statute affecting DOE. Under the Hazardous Materials Transportation Act, the U.S. Department of Transportation promulgates requirements for marking, labeling, and placarding vehicles transporting hazardous materials; providing emergency response information; and training hazardous material transport personnel.

**Low-Level Radioactive Waste Policy Act of 1980, as amended (42 U.S.C. 2021** *et seq.*)—This act amended the Atomic Energy Act to specify that the Federal Government is responsible for disposal of low-level radioactive waste, including Greater-Than-Class C waste, generated by certain activities, and that each state is responsible for disposal of other low-level radioactive waste generated within its borders. It provides for and encourages interstate compacts to carry out state responsibilities. As a result of the act, low-level radioactive waste owned or generated by DOE remains the responsibility of the Federal Government.

Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703 et seq.)—The Migratory Bird Treaty Act is intended to protect birds that have common migration patterns between the United States and Canada, Mexico, Japan, and Russia. The act stipulates that, except as permitted by regulations, it is unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill any migratory bird. Removal of nuisance migratory birds and active nests at WNYNSC needs to be performed under permit. New York State requires a permit for taking destructive wildlife under Environmental Conservation Law (ECL) 11-0521. See New York State regulations in Section 5.5 for more details.

National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.)—NEPA requires that a Federal agency evaluate the potential environmental impacts of implementing any major Federal action significantly affecting the quality of the human environment. The Council on Environmental Quality has promulgated regulations to implement the procedural provisions of NEPA. These regulations are binding on all Federal agencies and are codified at 40 CFR Parts 1500 through 1508. These specify the content of an EIS and include cooperating agency and public involvement requirements. In addition, DOE has developed its own NEPA implementing regulations, which are codified at 10 CFR Part 1021. DOE is complying with these requirements in preparing this *Decommissioning and/or Long-Term Stewardship EIS*.

**National Historic Preservation Act of 1966, as amended (16 U.S.C. 470** *et seq.*)—The National Historic Preservation Act contains procedures for evaluating historic properties, consulting with interested parties, and protecting and preserving cultural resources.

Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001)—The Native American Graves Protection and Repatriation Act establishes provisions for the treatment of inadvertent discoveries of American Indian remains and cultural objects. When discoveries are made during ground-disturbing activities, the activity in the area must immediately stop, and reasonable protective efforts, proper notifications, and appropriate disposition of the discovered items must be pursued. This law would be invoked if any activity at WNYNSC led to discoveries of American Indian graves or grave artifacts.

**Noise Control Act of 1972, as amended (42 U.S.C. 4901** *et seq.*)—Section 4 of the Noise Control Act directs Federal agencies to carry out programs in their jurisdictions "to the fullest extent within their authority" and in a manner that furthers a national policy of promoting an environment free from noise that jeopardizes health and welfare. This law provides requirements related to noise that would be generated by construction, operation, or closure activities associated with decommissioning and management activities at WNYNSC.

**Nuclear Waste Policy Act of 1982, as amended (42 U.S.C. 10101,** *et seq.*)—The Nuclear Waste Policy Act of 1982, as amended, formalizes the current Federal program for the disposal of high-level radioactive waste and spent nuclear fuel by directing DOE to characterize and evaluate Yucca Mountain for suitability as a potential repository for high-level radioactive waste and spent nuclear fuel; directing EPA to set generally applicable environmental radiation standards based on the authority of the Atomic Energy Act and other laws; and requiring the NRC to implement EPA standards by incorporating them into NRC licensing requirements for high-level radioactive waste and spent nuclear fuel repositories. Both EPA and the NRC have promulgated regulations pursuant to the act that establish standards to protect the public and to license disposal repositories.

EPA has promulgated generally applicable environmental standards in 40 CFR Part 191, "Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High Level and Transuranic Wastes." The regulations in 40 CFR Part 191 establish standards for management and storage of spent nuclear fuel, high-level radioactive waste, and transuranic waste at facilities regulated by the NRC or Agreement States. The 40 CFR Part 191 regulations also establish radiation protection standards for spent nuclear fuel, high-level radioactive waste, and transuranic waste at disposal facilities operated by DOE that are not regulated by the NRC or Agreement States.

Sections 180 (a) and (c) of the Nuclear Waste Policy Act require DOE to transport high-level radioactive waste and spent nuclear fuel to the repository only in packages certified by the NRC and provide technical assistance and funding to train public safety officials of local government units along transportation routes. In its April 30, 1998, revised policy proposal (63 FR 23753), DOE established that local jurisdictions would be eligible for grants approximately 4 years before the first shipment through state or Tribal lands.

As indicated in the Administration's fiscal year 2010 budget, the Administration intends to terminate the Yucca Mountain program while developing nuclear waste disposal alternatives. Notwithstanding this decision to terminate the Yucca Mountain program, DOE remains committed to meeting its obligations to manage and ultimately dispose of high-level radioactive waste and spent nuclear fuel. The Administration intends to convene a blue ribbon commission to evaluate alternative approaches for meeting these obligations. The commission will provide the opportunity for a meaningful dialogue on how best to address this challenging issue and will provide recommendations that will form the basis for working with Congress to revise the statutory framework for managing and disposing of high-level radioactive waste and spent nuclear fuel.

Occupational Safety and Health Act of 1970 (29 U.S.C. 651 et seq.)—Section 4(b)(1) of the Occupational Safety and Health Act exempts DOE and its contractors from the occupational safety requirements of the Occupational Safety and Health Administration. However, DOE's system of policies, Orders, and directives addresses worker safety (see Table 5–2). DOE Orders 5480.4 and 440.1A and 10 CFR Part 851 set forth environmental safety and health protection standards applicable to all DOE operations and contractors, and require that DOE and its contractors including those at WVDP comply with the Occupational Safety and Health Act standards at 29 CFR Part 1910.

**Pollution Prevention Act of 1990 (42 U.S.C. 13101** *et seq.*)—The Pollution Prevention Act of 1990 establishes a national policy for waste management and pollution control that focuses first on source reduction, then on environmentally safe recycling, treatment, and disposal. DOE would prepare a pollution prevention plan for any new facilities constructed and operated during decommissioning.

Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments (42 U.S.C. 6901 et seq.)—RCRA regulates the treatment, storage, and/or disposal of hazardous waste and requires a hazardous waste permit for any facility that treats or stores large quantities of hazardous waste for more than 90 days or disposes of hazardous waste at the facility. Groundwater monitoring is required of nearly all RCRA facilities; if standards for certain contaminants are exceeded, corrective measures must be undertaken. RCRA also imposes cleanup standards for concentrations of hazardous constituents in soils. RCRA regulations are administered in New York State by NYSDEC. RCRA also provides the statutory authority for the EPA administrator and/or authorized state regulatory authority (NYSDEC) to require implementation of RCRA corrective actions to protect human health and the environment from releases or potential releases of hazardous waste and/or hazardous constituents at WNYNSC. In March of 1992, an RCRA Section 3008(h) Administrative Order on Consent (discussed separately in more detail in the following subsection) was issued by EPA and NYSDEC to DOE and NYSERDA, requiring implementation of the RCRA Corrective Action Program at WNYNSC. As a part of this Order, DOE and NYSERDA were required to perform corrective action activities including, but not limited to, interim measures to reduce or eliminate threats to human health and the environment if necessary, an RCRA facility investigation to determine if any release had occurred, and a Corrective Measures Study to evaluate selection of remedial alternatives for the Solid Waste Management Units (SWMUs) and any releases therefrom at WNYNSC.

Cleanup of any units subject to the RCRA programs would be performed in accordance with the RCRA Permitting and/or Corrective Action Programs, as applicable. Development of the closure/management strategy would involve consultation with regulators.

#### Administrative Order on Consent (RCRA 3008[h])

In 1992, an RCRA Section 3008(h) Administrative Order on Consent was issued by EPA and NYSDEC to DOE and NYSERDA. The Consent Order specifies the work to be performed by DOE and NYSERDA to protect human health and the environment from releases or potential releases of hazardous waste and/or hazardous constituents at WNYNSC. It requires RCRA facility investigations of onsite SWMUs to determine if there has been a release, or a potential for release, of hazardous waste and/or hazardous constituents from SWMUs. The Order also requires that corrective measures be taken, if necessary. All RCRA facility investigation reports for SWMUs originally identified in 1992 were completed by 1997. In addition, required notifications to EPA and NYSDEC have occurred for three additional SWMUs that were identified in 2003 and 2004. All identified SWMUs from which there has been a release, or a potential release, of hazardous constituents are under continuous monitoring (WVNS and URS 2004a).

The Consent Order also requires Corrective Measures Studies to be performed, if necessary, to evaluate selection of remedial alternatives for some of the SWMUs at WNYNSC.

Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300(f) et seq.)—The Safe Drinking Water Act, as amended, establishes minimum national standards for public water supply systems in the form of maximum contaminant levels for pollutants, including radionuclides. Although NYSDOH has primacy for the Safe Drinking Water Act in New York, the water quality standards are implemented by NYSDEC, which administers the act in the state. Groundwater is not currently used as a public water supply at WNYNSC. The maximum contaminant level for manmade beta and gamma emitters is based on a dose limit of 4 millirem per year. This limit applies to community water systems, including any that might utilize waters from WNYNSC.

The Safe Drinking Water Act also mandates the establishment of a permit program to regulate the construction and operation of underground injection wells under the Underground Injection Control Program. EPA maintains authority over the Underground Injection Control Program and implements the regulations in New York State under 40 CFR Part 144 and 40 CFR Part 146. These regulations would apply to closure of the injection well in Waste Management Area 11 at WNYNSC.

#### Sole-Source Aquifer

WNYNSC overlies the Cattaraugus Creek Basin Aquifer, which is a federally designated sole-source aquifer pursuant to Section 1424(e) of the Safe Drinking Water Act. Therefore, this EIS is subject to EPA review of DOE activities associated with WVDP. If EPA review raises concerns that the project is not protective of groundwater quality or safe drinking water standards, as applicable, the agency can make specific recommendations or mandate additional pollution prevention requirements. Although New York State does not regulate the Cattaraugus Creek Basin Aquifer, under sole-source aquifer designation, the state's ECLs do apply to all sources of drinking water (surface and groundwater) throughout the state, including the Cattaraugus Creek Basin Aquifer. These regulations are discussed in more detail under New York State environmental regulations in Section 5.5 of this chapter.

The Bald and Golden Eagle Protection Act of 1940, as amended (16 U.S.C. 668–668d)—The Bald and Golden Eagle Protection Act makes it unlawful to take, pursue, molest, or disturb bald (American) and golden eagles, their nests, or their eggs anywhere in the United States. The U.S. Fish and Wildlife Service reviews EISs to determine whether the activities analyzed would comply with the Bald and Golden Eagle Protection Act.

**Toxic Substances Control Act (15 U.S.C. 2601** *et seq.*)—The Toxic Substances Control Act (TSCA) regulates the manufacture, processing, distribution, and use of certain chemicals not regulated by RCRA or other statutes, including asbestos-containing material and polychlorinated biphenyls. Any TSCA-regulated waste removed from structures (e.g., capacitors contaminated with polychlorinated biphenyls) or discovered during decommissioning activities (e.g., contaminated media) would be managed in compliance with TSCA requirements in 40 CFR Part 761. The end-state evaluation for all alternatives considers compliance with TSCA.

Waste Isolation Pilot Plant Land Withdrawal Act of 1992 (Public Law 102-579), as amended by the Waste Isolation Pilot Plant Land Withdrawal Act Amendments (Public Law 104-201)—The Waste Isolation Pilot Plant Land Withdrawal Act required the withdrawal of land from the public domain for the purpose of creating and operating the Waste Isolation Pilot Plant (WIPP), the geologic repository in New Mexico designated as the national disposal site for defense transuranic waste. The act also defines the characteristics and amount of waste acceptable for disposal at the facility. The amendments to the act exempt waste to be disposed of at WIPP from RCRA land disposal restrictions. Prior to sending any transuranic waste from WVDP to WIPP, DOE would have to make a determination that the waste meets all statutory and regulatory requirements for disposal at WIPP.

West Valley Demonstration Project Act of 1980 (Public Law 96-368)—The WVDP Act established WVDP to demonstrate technologies for solidifying liquid high-level radioactive waste at WNYNSC. The act assigns DOE responsibility for solidifying the high-level radioactive waste on site and transporting the solidified waste to an appropriate Federal repository for disposal. The act also assigns DOE the responsibility to treat and dispose of low-level radioactive and/or transuranic waste generated during the solidification activities and decommission the WVDP facilities used as a part of WVDP.

The WVDP Act does not address termination of the NRC license for the site, or portions thereof. Any such license termination would be conducted (if license termination is possible and pursued) under the Atomic Energy Act of 1954, as amended. The WVDP Act authorized the NRC to prescribe decommissioning criteria for WVDP. The NRC exercised this authority starting in 1999 by publishing a draft policy statement on decommissioning criteria for WVDP. After a public comment period, the NRC issued a final policy statement in 2002 prescribing the NRC's License Termination Rule as the decommissioning criteria to be used at WVDP. A more-detailed discussion of the final policy statement follows. Additionally, a legal suit filed against DOE by the Coalition on West Valley Nuclear Wastes & Radioactive Waste Campaign challenging certain DOE actions with regard to disposal of the low-level radioactive waste generated as a part of WVDP resulted in a Stipulation of Compromise Settlement, which is discussed in more detail in a subparagraph that follows.

#### NRC Final Decommissioning Policy Statement

Under authority of the WVDP Act, the NRC published its final policy statement in 2002, adopting the NRC License Termination Rule provisions as the decommissioning criteria for the WVDP (67 FR 5003; February 1, 2002).

The criteria of the License Termination Rule applies to the decommissioning of (1) the high-level radioactive waste tanks and other facilities in which high-level radioactive waste solidified under WVDP was stored, (2) the facilities used in the solidification of the waste, and (3) any material or hardware used in connection with WVDP. The policy statement also provided criteria for the determination of wastes "incidental" to reprocessing and established that the calculated dose from this incidental waste is to be integrated with all the other

calculated doses from the remaining material at the entire NRC-licensed site to ensure that the NRC decommissioning criteria are met.

Although the policy statement prescribes the use of the NRC's License Termination Rule as the decommissioning criteria for WVDP, the NRC recognizes that health and safety and costbenefit considerations may justify the evaluation of alternatives that do not fully comply with the License Termination Rule criteria. Therefore, the NRC is prepared to provide flexibility to assure cleanup to the maximum extent technically and economically feasible (67 FR 5004). DOE may request alternative criteria and/or potential exemptions to the requirements under 10 CFR Part 20 Subpart E and Subpart N, respectively, based on site-specific analysis that demonstrates that public health and safety will be adequately protected with reasonable assurance (67 FR 5004). The policy statement also provides that the criteria in the License Termination Rule will also apply to the termination of NYSERDA's NRC license after the license is reactivated. For those portions of the site covered by the WVDP Act, it is NRC's intent that any exemptions or alternative criteria authorized for DOE to meet the provisions of the WVDP Act will also apply to NYSERDA at the time of site license termination, if license termination is possible (67 FR 5011).

### Coalition on West Valley Nuclear Wastes & Radioactive Waste Campaign and DOE Stipulation of Compromise Settlement

In 1986, the Coalition on West Valley Nuclear Waste and Radioactive Waste Campaign ("coalition") filed an action in the U.S. District Court for the Western District of New York challenging certain proposed actions of DOE related to disposal of low-level radioactive waste generated from activities associated with solidification of high-level radioactive waste at WVDP. As a result of this action, the coalition and DOE entered into a Stipulation of Compromise Settlement ("stipulation"), dated May 27, 1987. In the stipulation, the coalition and DOE agreed, among other things, that an EIS addressing the closure of the post-solidification phase of WVDP would include analysis of the disposal of Class A and Class B/C low-level radioactive wastes "generated as a result of the activities of the Department of Energy at the WVDP and mandated by the Congress under the WVDP Act." Further, for consideration of any onsite disposal, DOE shall evaluate "erosion impacts and erosion control impacts and the need for erosion control measures." (Civil No. 86-1052-C, U.S. District Court, Western District of New York, May 27, 1987).

#### 5.3 Federal Environmental, Safety, and Health Executive Orders

Executive Orders establish policies and requirements for Federal agencies. Executive Orders are applicable to Executive branch agencies, but do not have the force of law or regulation. The applicability of the following Executive Orders were considered as they relate to the proposed action at WVDP.

Executive Order 11514, Protection and Enhancement of Environmental Quality (March 5, 1970, as amended by Executive Order 11991, May 24, 1977)—This Order (regulated by 40 CFR Parts 1500 through 1508) requires Federal agencies to continually monitor and control their activities to (1) protect and enhance the quality of the environment, and (2) develop procedures to ensure the fullest practicable provision of timely public information and understanding of the Federal plans and programs that may have potential environmental impact so that views of interested parties can be obtained. DOE has issued regulations (10 CFR Part 1021) and DOE Order 451.1B for compliance with this Executive Order. This *Decommissioning and/or Long-Term Stewardship EIS* has been prepared in accordance with all NEPA regulations.

Executive Order 11593, Protection and Enhancement of the Cultural Environment (May 6, 1971)—This Order directs Federal agencies to locate, inventory, and nominate qualified properties under their jurisdiction or control to the National Register of Historic Places. This process requires DOE to provide the Advisory Council on Historic Preservation the opportunity to comment on the possible impacts of the proposed activity on any potential eligible or listed resources.

**Executive Order 11988, Floodplain Management (May 24, 1977)**—This Order requires Federal agencies to establish procedures to ensure that the potential effects of flood hazards and floodplain management are considered for any action undertaken in a floodplain, and that floodplain impacts are avoided to the extent practicable. DOE has issued regulations at 10 CFR Part 1022, "Compliance With Floodplain and Wetland Environmental Review Requirements," to implement the requirements of Executive Orders 11988 and 11990 (44 FR 12596).

Executive Order 11990, Protection of Wetlands (May 24, 1977)—This Order requires Federal agencies to avoid any short- or long-term adverse impacts on wetlands wherever there is a practicable alternative and to provide opportunity for early public review of any plans or proposals for new construction in wetlands.

Executive Order 12088, Federal Compliance with Pollution Control Standards (October 13, 1978, as amended by Executive Order 12580, January 23, 1987)—This Order directs Federal agencies to comply with applicable administrative and procedural pollution control standards established by, but not limited to, the Clean Air Act, the Noise Control Act, the Clean Water Act, the Safe Drinking Water Act, the TSCA, and RCRA.

Executive Order 12148, Federal Emergency Management (July 20, 1979)—This Order transfers functions and responsibilities associated with Federal emergency management to the director of the Federal Emergency Management Agency. The Order assigns the director the responsibility to establish Federal policies for and to coordinate all civil defense and civil emergency planning, management, mitigation, and assistance functions of Executive agencies.

Executive Order 12580, Superfund Implementation (January 23, 1987, as amended by Executive Order 13308, June 20, 2003)—This Order delegates to the heads of Executive departments and agencies the responsibility of undertaking remedial actions for releases or threatened releases that are not on the National Priorities List and removal actions, in non-emergency situations, where the release is from any facility under the jurisdiction or control of Executive departments or agencies.

Executive Order 12656, Assignment of Emergency Preparedness Responsibilities (November 18, 1988)—This Order assigns emergency preparedness responsibilities to Federal departments and agencies.

Executive Order 12856, Right-to-Know Laws and Pollution Prevention Requirements (August 3, 1993)—Executive Order 12856 directs Federal agencies to reduce and report toxic chemicals entering any waste stream; to improve emergency planning, response, and accident notification; and to meet the requirements of the Emergency Planning and Community Right-to-Know Act.

Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (February 11, 1994)—This Order requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.

Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities (March 8, 1994)—This Order requires Federal agencies to develop and implement a program for conservation of energy and water resources. As part of this program, agencies are required to conduct comprehensive facility audits of their energy and water use.

**Executive Order 13007, Indian Sacred Sites (May 24, 1994)**—This Order directs Federal agencies, to the extent permitted by law and not inconsistent with agency missions, to avoid adverse effects on sacred sites and to provide access to those sites to American Indians for religious practices. The Order directs agencies to provide protection of and access to sacred sites to the extent compatible with the project at hand.

Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (April 21, 1997, as amended by Executive Order 13229, October 9, 2001, and Executive Order 13296, April 18, 2003)—This Order requires each Federal agency to make it a high priority to identify and assess environmental health and safety risks that may disproportionately affect children and to ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health or safety risks.

**Executive Order 13112, Invasive Species (February 3, 1999)**—This Order directs Federal agencies to act to prevent the introduction of or to monitor and control invasive (non-native) species, to provide for restoration of native species, to conduct research, to promote educational activities, and to exercise care in taking actions that could promote the introduction or spread of invasive species. During decommissioning, rehabilitation of disturbed areas would be accomplished by reseeding or revegetating areas with native plants and trees.

Executive Order 13175, Consultation and Coordination with Indian Tribal Governments (November 6, 2000)—This Order directs Federal agencies to establish regular and meaningful consultation and collaboration with Tribal governments in the development of Federal policies that have Tribal implications, to strengthen U.S. government-to-government relationships with American Indian Tribes, and to reduce the imposition of unfunded mandates on Tribal governments.

Executive Order 13423, Strengthening Federal Environmental, Energy, and Transportation Management (January 24, 2007)—This Order requires, among other things, Federal agencies to improve energy efficiency and reduce greenhouse gas emission through reduction of energy intensity. It also requires the agencies to ensure that at least half of the statutorily required renewable energy consumed by the agencies in a fiscal year comes from new renewable sources; to the extent feasible, the agencies must implement renewable energy generation projects. It requires agencies to reduce the quantity of toxic and hazardous chemicals and materials acquired, used, or disposed of, and maintain effective waste prevention and recycling programs. It also directs agencies to incorporate waste prevention and recycling in its daily operations and work to increase and expand markets for recovered materials. It also requires agencies to ensure that new construction and major renovations of agency buildings comply with guidance principles for high performance and sustainable buildings.

Executive Order 13514, Federal Leadership in Environmental, Energy, and Economic Performance (October 5, 2009)—This Order directs Federal agencies to increase energy efficiency; reduce greenhouse gas emissions; conserve and protect water resources; foster markets for sustainable technologies and environmentally preferable materials, products and services; and design, construct, maintain and operate high performance sustainable buildings. This Order also requires Federal agencies to prepare and provide to the Council on Environmental Quality and the Office of Management and Budget, and annually update, a Strategic Sustainability Performance Plan that identifies and tracks percentage reduction targets or other goals for each of the identified areas by which to measure progress toward meeting the performance requirements established by this Order.

#### 5.4 U.S. Department of Energy Environmental, Safety, and Health Regulations and Orders

The Atomic Energy Act authorizes DOE to establish standards to protect health or minimize dangers to life or property for activities under DOE's jurisdiction. (DOE regulations and Orders do not apply to activities regulated by the NRC.) DOE regulations are found in Title 10 of the CFR. These regulations address such areas as energy conservation, administrative requirements and procedures, nuclear safety, and classified information.

For the purpose of this EIS, relevant regulations include the following: "Procedural Rules for DOE Nuclear Activities" (10 CFR Part 820), "Nuclear Safety Management" (10 CFR Part 830), "Occupational Radiation Protection" (10 CFR Part 835), "Compliance with the National Environmental Policy Act" (10 CFR Part 1021 and DOE Order 451.1B), and "Compliance with Floodplain and Wetland Environmental Review Requirements" (10 CFR Part 1022).

Table 5–2 in Section 5.7 lists the DOE Orders and policies potentially relevant to the alternatives evaluated in this *Decommissioning and/or Long-Term Stewardship EIS*.

#### 5.5 New York State Environmental, Safety, and Health Laws and Regulations

The Atomic Energy Act authorizes the NRC to enter into an agreement with a state in which the NRC will discontinue and the state will assume regulatory authority over certain radioactive materials. NYSDOH and NYSDEC have established requirements under this Agreement State Program.

As of July 1, 2006, New York State authority for the Radiological Health Program, including ionizing radiation protection (12 New York Code of Rules and Regulations [NYCRR] Part 38), was transferred from the New York State Department of Labor to NYSDOH. As such, NYSDOH now has jurisdiction over the commercial and industrial use of radioactive materials in New York State, including the possession of radioactive materials at the SDA at WNYNSC. NYSDOH now maintains authority over the radioactive materials license (originally issued by the New York State Department of Labor) that authorizes NYSERDA to possess and manage emplaced radioactive waste at the SDA. The license requires NYSERDA to conduct its operations in accordance with a radioactive safety program to minimize radiation exposures to workers and the public resulting from SDA operations. Although NYSDOH is the lead agency for the protection of public health from any public health threat, including ionizing radiation, NYSDEC, under its responsibility as established in New York ECL, will serve as the lead agency for the decommissioning project. NYSDOH will participate in the project by reviewing and concurring with NYSDEC on any remedial actions, thus ensuring that the public health is protected.

Under the New York Agreement State Program, NYSDEC has jurisdiction over discharges of radioactive material to the environment, including releases to the air and water, and disposal of radioactive waste in the ground. NYSDEC's role at the SDA is to ensure that NYSERDA properly maintains the integrity of the SDA, minimizes discharges of radioactive material to the environment, and properly closes the facility in a manner that is protective of the public health and environment and in compliance with 6 NYCRR Part 380, "Prevention and Control of Environmental Pollution by Radioactive Materials."

Additionally, NYSDEC has jurisdiction over inactive waste sites under the State Superfund Program (6 NYCRR Part 375) and discharges from SWMUs, as well as permitting and closure of RCRA interim and final status units under the Hazardous Waste Program (6 NYCRR Parts 370–374, 376). The New York State

<sup>&</sup>lt;sup>1</sup> Regulators Communication Plan on Application of Cleanup Requirements for Decommissioning the West Valley Site, Revision 1, May 20, 2003 (EPA et al. 2003).

RCRA regulations apply to DOE and its contractors. The state-licensed sites and activities such as the SDA, however, are regulated under both NYSDEC radiation protection and RCRA regulations.

In addition to implementing some Federal programs, state legislatures develop their own laws. State statutes supplement as well as implement Federal laws for protection of air, water quality, and groundwater. State legislation may address solid waste management programs, locally rare or endangered species, and local historic and cultural resources. New York State laws and regulations applicable to alternatives evaluated in this EIS are enumerated and briefly discussed in this section. They are presented in alphabetical order.

**Air Pollution Control Act (ECL 19-0101** *et seq.*)—New York State air quality regulations would be applicable to emission-producing activities during decommissioning, such as construction, excavation, and demolition; vehicle emissions; and waste treatment processes that would be performed under some alternatives. Under NYSDEC's air permitting program, a permit is required to operate an "air contamination source." WNYNSC holds a sitewide air permit issued by NYSDEC that could require modification to encompass emissions during decommissioning activities.

Clean Water Act ECL Articles 15, 17; 6 NYCRR Parts 649–758)—The Federal Clean Water Act allows for primary enforcement and administration through the states, provided the state program is at least as stringent as the Federal program. New York regulations with regard to ambient water quality standards and effluent limitations were substantially revised in 1973 as ECL Article 17 to conform to the Clean Water Act and facilitate assumption of authority for the Federal NPDES program from EPA to NYSDEC. The primary mechanism to control water pollution is the requirement that direct dischargers obtain an NPDES permit, or, in the case of states such as New York, where the authority has been assumed from EPA, an SPDES permit, pursuant to the Clean Water Act.

An important difference between the Federal regulations and New York State regulations is the definition of waters regulated by the state. ECL Article 17 not only includes all navigable waters within the state, but also encompasses all "bodies of...underground water," while the Clean Water Act only regulates surface waters. All fresh groundwater in New York State is Class GA with best use being designated as source of drinking water. The Cattaraugus Creek Drainage Basin Aquifer is located under WNYNSC and is thus subject to these New York State effluent limitations and ambient water quality standards. Therefore, this EIS is subject to NYSDEC review, and an SPDES permit is required under New York State law for all discharges to both surface waters and groundwater.

Endangered and Threatened Species Protection (ECL 9-1503, 11-0535 et seq.; 6 NYCRR Parts 182, 193)—The NYSDEC Bureau of Wildlife has identified a 1,619-hectare (4,000-acre) area, including all of WNYNSC, on the New York State critical habitat map as a deer wintering ground, in addition to the potential for the presence of state-listed threatened or endangered species on the site. Decommissioning activities that could potentially impact confirmed state-listed threatened and endangered plant species and the state's critical habitat must be coordinated through the NYSDEC Bureau of Wildlife.

New York Freshwater Wetlands Act (ECL 24-0101 et seq.; 6 NYCRR Part 663)—Six linked wetland areas identified on the southern portion of WNYNSC have been listed as a single wetland subject to state jurisdiction. Activities requiring a permit include draining, filling, or excavating wetlands and changing or obstructing the flow of water into or through wetland areas or within 30 meters (100 feet) of designated wetland areas. Because NYSDEC has identified a single state-jurisdictional wetland on WNYNSC, a permit would be required before certain activities within the wetland or its 30-meter-wide (100-foot-wide) buffer area could be implemented. Consultation with NYSDEC would be required if implementation of a global erosion control strategy could destroy or disturb the state-jurisdictional wetland.

New York State Environmental Quality Review Act (ECL 8-0101 et seq.; 6 NYCRR Part 617)—The New York State Environmental Quality Review Act requires all state and local government agencies to consider environmental impacts equally with social and economic factors during discretionary decisionmaking. This means these agencies must assess the environmental significance of all actions they have discretion to approve, fund, or directly undertake. The act requires the agencies to balance environmental impacts with social and economic factors when deciding to approve or undertake an action. This EIS has been prepared to meet NYSERDA's SEQR responsibilities for its decisionmaking process for management of WNYNSC.

Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments (ECL Article 27; Titles 7, 9; 6 NYCRR Parts 370–374, 376)—RCRA regulations are administered in New York State by NYSDEC. Facilities in New York State in existence when the regulations took effect can continue operations under interim status by submitting a RCRA Part A permit application to NYSDEC. WVDP has been operating under interim status since 1990, and in December 2004 transmitted a Part 373/RCRA permit application to NYSDEC for review and processing. In February 2005, NYSDEC indicated that they would begin their technical review. However, NYSDEC's review of the 2005 Preliminary Draft EIS and the ongoing work at WNYNSC has taken precedence. A revised Part 373/RCRA Permit Application will need to be submitted to update the facility information and changes.

Closure or management of RCRA interim or final status units would be performed in accordance with closure plans or other regulatory vehicles. Development of the closure/management strategy would involve consultation with regulators.

RCRA also provides the statutory authority for the EPA administrator and/or authorized state regulatory authority (NYSDEC) to require implementation of RCRA corrective actions to protect human health and the environment from releases or potential releases of hazardous waste and/or hazardous constituents at WNYNSC. In March of 1992, an RCRA Section 3008(h) Administrative Order on Consent was issued by EPA and NYSDEC to DOE and NYSERDA, requiring implementation of the RCRA Corrective Action Program at WNYNSC. As a part of this Order, DOE and NYSERDA were required to perform corrective action activities including, but not limited to, interim measures to reduce or eliminate threats to human health and the environment if necessary, an RCRA facility investigation to determine if any release had occurred, and, when directed by NYSDEC, a Corrective Measures Study to evaluate selection of remedial alternatives for SWMUs at WNYNSC.

**State Pollutant Discharge Elimination System (ECL Article 17; 6 NYCRR Part 750** *et seq.*)—New York State's SPDES program is governed by ECL Article 17, as discussed in the preceding section on the Clean Water Act, and 6 NYCRR Parts 750 *et seq.* New York's SPDES program must be consistent with the applicable provisions of the Clean Water Act and the NPDES program and with the Federal implementing regulations applicable to municipal sewage treatment plants.

An SPDES permit from NYSDEC is required to discharge any pollutant to state waters from an outlet or point source. There are two SPDES permits for WNYNSC: DOE was issued a permit for WVDP, and NYSERDA was issued a separate permit for the SDA.

Construction activities impacting 0.4 hectares (1 acre) or more require an SPDES construction permit. The permit requires that all construction activities be conducted in conformance with state-derived performance standards for erosion control and stormwater management. Significant addition or modification to existing facilities and discharges would require modifying the WVDP SPDES permit and preparing a stormwater pollution prevention plan. An SPDES permit also would be necessary if a mobile wastewater treatment unit is used during decommissioning. An SPDES permit that includes provisions for long-term monitoring of surface water and surface water discharges could be required after decommissioning under restricted use scenarios.

Stream Protection Act (ECL 15-0501; 6 NYCRR Part 608)—With some exceptions, no person or public corporation may change, modify, or disturb the course, channel, or bed of a protected stream or remove any sand, gravel or other materials from the bed of a protected stream or its banks [classification and standard of C(T) or higher] without first obtaining a stream protection permit from NYSDEC (6 NYCRR 608.2, "Disturbance of Protected Streams"). Regulations at 6 NYCRR 608.3, "Dams and Impoundment Structures," may be relevant to alternatives altering the reservoir dams in Waste Management Area 12.

The New York State Historic Preservation Act (Parks, Recreation, and Historic Preservation Law Section 14.09; 9 NYCRR Parts 426–428)—The commissioner of parks, recreation and historic preservation, in consultation with the State Board for Historic Preservation, has established the New York State Register of Historic Places. Buildings or other facilities on or eligible for listing on the State Register of Historical Places and sites listed on the National Register of Historic Places are provided special protections.

Waste Transporter Permits (ECL Article 27; Titles 3, 9, 15; 6 NYCRR Parts 364, 372, 381)—As an Agreement State under the Atomic Energy Act, NYSDEC regulations require transporters of low-level radioactive waste or mixed waste into, within, and through the state to obtain a permit from NYSDEC and submit low-level radioactive waste manifests. These regulations are found in 6 NYCRR Parts 372 and 381, "Low-Level Radioactive Waste Transporter Permit and Manifest System." New York law also requires waste transporter permits for solid, industrial, and hazardous waste under 6 NYCRR Part 364.

Wells, Oil, and Petroleum Tanks (6 NYCRR Parts 555 and 613)—The "West Valley Regulators Communication Plan" (EPA et al. 2003) notes that cleanup must meet NYSDEC requirements for closure of abandoned oil and gas wells under 6 NYCRR Part 555 and comply with handling and storage of petroleum under 6 NYCRR Part 613.

#### 5.6 Consultations

Certain laws, such as the Endangered Species Act (16 U.S.C. 1536), the Fish and Wildlife Coordination Act (16 U.S.C. 661), and the National Historic Preservation Act (16 U.S.C. 470f), require consultation and coordination by DOE with other governmental entities, including other Federal agencies, state and local agencies, and federally recognized American Indian governments. These consultations must occur on a timely basis and are generally required before any land disturbance can begin. Most of these consultations are related to ecological resources, cultural resources, and American Indian rights. The ecological resource consultations generally pertain to the potential for activities to disturb sensitive species or habitats. Cultural resource consultations relate to the potential for disruption of important cultural resources and archaeological sites. American Indian consultations concern the potential for disturbance of ancestral American Indian sites, the traditional practices of American Indians, and natural resources of importance to American Indians. Correspondence related to consultations are presented in Appendix O.

DOE has been in consultation with the appropriate Federal and New York State agencies and American Indian governments as required by other actions considered or taken at WNYNSC in the past, as identified in Sections 5.6.1 through 5.6.3. The consultations required under this *Decommissioning and/or Long-Term Stewardship EIS* and with the coordinating agencies and American Indian governments are discussed in the following sections.

#### **5.6.1** Ecological Resources Consultations

DOE has completed consultations related to potential actions identified in this EIS and their possible impacts on ecological resources at WNYNSC. These consultations have been conducted with the appropriate regional and field offices of the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and counterpart New York State agencies.

#### Consultations Required Under the Endangered Species Act of 1973 (16 U.S.C. 1531–1544)

In July 2008, DOE requested and received input from the U.S. Fish and Wildlife Service regarding the presence of threatened and endangered species on site. In June 2009, the U.S. Fish and Wildlife Service provided comments on the November 2008 Revised Draft EIS, including a concern that two endangered mollusks, the clubshell and rayed bean, could possibly occur on site or in nearby creeks. DOE's response to these comments indicated the clubshell and rayed bean, although reported in Cattaraugus County, were not found in Buttermilk or Cattaraugus Creeks when those streams were surveyed in 1991 (WVNS 1992b). Additionally, these mollusks were not reported by the New York Natural Heritage Program when that organization was consulted concerning state-listed species potentially present in the vicinity of the site (Seoane 2008). In August 2009, DOE sent a letter to the U.S. Fish and Wildlife Service requesting acknowledgement of DOE's determination that there would be no impacts on threatened or endangered species associated with proposed activities evaluated in this EIS.

The U.S. Fish and Wildlife Service was also consulted regarding potential impacts on migratory bird species. On June 12, 2007, DOE sent a letter to the Migratory Bird Permit Office of the U.S. Fish and Wildlife Service and the NYSDEC Division of Fish and Wildlife with a completed application package requesting renewal of the Federal Migratory Bird Depredation Permit and New York State Fish and Wildlife Depredation License for the site. The Federal and state permit and license, respectively, allow for the limited taking of certain migratory bird species and active and inactive birds nests to mitigate the transport and spread of radiological contamination and asbestos from delineated and controlled areas of WNYNSC. The transport and spread of radiological contamination and asbestos pose potential human health and safety concerns and could disrupt cleanup operations at the site.

#### Consultations Required Under the Clean Water Act (33 U.S.C. 1251 et seq.)

On March 21, 2006, the Buffalo District of the U.S. Army Corps of Engineers confirmed that wetlands under Federal jurisdiction exist on the property. This judgment was based on a field visit conducted on November 2, 2005, the review of applicable topographic wetland maps of the area, and a 2003 wetland delineation report (WVNS and URS 2004b). The wetlands identified by the U.S. Army Corps of Engineers were determined to be waters of the United States and therefore subject to regulation under Section 404 of the Clean Water Act. Further, the waters are part of an ecological continuum constituting a surface-water tributary system of Buttermilk Creek, Cattaraugus Creek, and Lake Erie. As such, authorization from the U.S. Army Corps of Engineers to work in these areas is necessary (Senus 2006). On December 28, 2005, NYSDEC Region 9 concurred with the wetland delineation conducted in 2003 and concluded that there are a number of wetlands that in aggregate constitute an Article 24 state jurisdictional wetland (Ermer 2005).

Since that time, a Supreme Court ruling was issued in the case of *Rapanos v. United States & Carabell v. United States* regarding the classification of isolated wetlands as jurisdictional. In July 2007, the U.S. Army Corps of Engineers, in conjunction with the U.S. Environmental Protection Agency (EPA and ACE 2007), issued new guidance implementing this decision, which indicates that under certain circumstances, isolated wetlands may constitute, in part or in aggregate, a jurisdictional wetland. In accordance with this guidance, for the purposes of analysis in this EIS, DOE is considering an additional 0.98 hectares [2.43 acres] at WNYNSC jurisdictional wetlands, which increases the total acreage of jurisdictional wetlands impacted by WVDP by 0.04 hectares [0.1 acres].

#### **5.6.2** Cultural Resources Consultations

A cultural resources study for approximately 146 hectares (360 acres) that at the time were thought could be affected by future plans and/or WNYNSC closure activities was performed in 1990 (Pierce 1991). Based on information from that study submitted to the New York State Historic Preservation Office, it was determined

that facilities on the Project Premises are not eligible for inclusion on the National Register of Historic Places (Kuhn 1995). Although no alternative is expected to impact important cultural resources, the potential for inadvertent discovery of prehistoric or archaeological resources exists. If any cultural resources were discovered during land-disturbing activities, those activities would be halted, and consultations would be conducted with the New York State Historic Preservation Office.

#### **5.6.3** American Indian Consultations

Communications have been ongoing between DOE and the Seneca Nation of Indians, the only federally recognized American Indian government located in the area of WNYNSC. A Cooperative Agreement was signed in 1996 to foster government-to-government relationships between the Seneca Nation of Indians and DOE (Seneca Nation 1996). The Cooperative Agreement continues activities that promote an understanding of environmental and human health issues and has provided the resources needed to review and comment on previous environmental documents, formulate a baseline environmental sampling plan, compile preliminary information on population and lifestyles, and educate the Seneca Nation of Indians on issues related to WNYNSC.

In 2000, DOE and the Seneca Nation of Indians signed a Memorandum of Agreement for shipment of WVDP spent nuclear fuel and high-level radioactive waste, and foreign research reactor spent nuclear fuel across Seneca Nation of Indians lands. The Memorandum of Agreement provides for the safe and secure transportation of such material through coordination with the Seneca Nation of Indians (Seneca Nation 2000).

Other communications that have taken place with the Seneca Nation of Indians not specific to NEPA activities include the following:

- On March 26, 2002, a consultation between DOE and the Seneca Nation of Indians was held at the Cattaraugus Reservation Library to discuss local and national issues affecting the Seneca Nation of Indians and DOE.
- On April 10, 2004, the Seneca Nation Tribal Council approved the *Final Baseline Sampling Report* as an official publication of the Seneca Nation of Indians. This report describes the sampling that was undertaken by the Seneca Nation Environmental Department to understand the level of radioactivity present in Cattaraugus Creek water, sediment, soil, plants, and animals. This information will be used to help gauge any impact of future cleanup and closure activities at WNYNSC on the Cattaraugus Creek environment.

On July 21, 2008, DOE sent a letter to the Seneca Nation of Indians requesting consultation regarding preparation of this EIS, and met with the Tribal Council on December 18, 2008, for the formal consultation. A public meeting on the 2008 Revised Draft EIS was held at the William Seneca Building on March 31, 2008, during which the Seneca Nation of Indians' resolution stating the Tribe's position on the EIS was read. This resolution, submitted on the record as formal comment on the November 2008 Revised Draft EIS, completed the consultation process.

In addition, copies of the November 2008 Revised Draft EIS were sent for comment to federally recognized American Indian governments in states with radioactive waste disposal sites identified as potential disposition locations for waste generated as a result of activities evaluated in this EIS.

#### 5.7 Summary Tables

Tables 5–1 and 5–2 provide a listing of the potentially applicable laws, regulations, Orders, and requirements discussed in the preceding sections.

Table 5–1 Major Laws, Regulations, and Requirements Potentially Relevant to the Decommissioning and/or Long-Term Stewardship of the Western New York Nuclear Service Center

Regulation/Agency	Service Center  Title/Application		
Regulation/Agency	Title/Application		
Nuclear Requirements  NBC (10 CFR Charter I) NBC Liversia (Requirements Provides Requirements)			
NRC (10 CFR Chapter I) 42 U.S.C. 2011 et seq.	NRC – Licensing/Permitting/Decommissioning Requirements <sup>2</sup> Atomic Energy Act		
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42 U.S.C. 2021 et seq. 67 FR 5003	Low-Level Radioactive Waste Policy Act  Decommissioning Criteria for the West Valley Demonstration Project (M-32) at the		
07 FK 3003	West Valley Site; Final Policy Statement		
10 CFR Part 20	Standards for Protection Against Radiation		
10 CFR Part 50	Domestic Licensing of Production and Utilization Facilities		
10 CFR Part 61	Licensing Requirements for Land Disposal of Radioactive Waste		
New York State – NYSDEC and NYSDOL	New York State-Environmental Conservation Rules and Regulations		
6 NYCRR Part 380	Prevention and Control of Environmental Pollution by Radioactive Materials		
6 NYCRR Part 381	Transporters of Low-Level Radioactive Waste		
6 NYCRR Parts 382–383	Regulations for Low-Level Radioactive Waste Disposal Facilities and Financial Assurance Requirements		
12 NYCRR Part 38	Ionizing Radiation Protection		
TAGM 4003	DSHM-RAD-05-01		
DOE (10 CFR Chapter II)	U.S. Department of Energy		
10 CFR Part 820	Procedural Rules for DOE Nuclear Activities		
10 CFR Part 830	Nuclear Safety Management		
10 CFR Part 835	Occupational Radiation Protection		
10 CFR Part 962	Byproduct Material		
42 U.S.C. 2021 et seq.	Low-Level Radioactive Waste Policy Act of 1980, as amended		
EPA (40 CFR Chapter I, Subchapter F)	U.S. Environmental Protection Agency – Radiation Protection Programs		
40 CFR Part 191	Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Waste		
	Solid, Hazardous, and Toxic Waste		
EPA	EPA – Hazardous Waste Requirements		
42 U.S.C. 6901 et seq.	Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments		
40 CFR Parts 260–282	Hazardous Waste Management (RCRA)		
40 CFR Part 761	PCBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions (TSCA)		
New York State – NYSDEC	Hazardous Waste Requirements		
6 NYCRR Part 364	Waste Transporter Permits		
6 NYCRR Parts 370–376	Hazardous Waste Management		
6 NYCRR Part 613	Handling and Storage of Petroleum		
6 NYCRR Part 555	Plugging and Abandonment		
TAGM 4046	Determination of Soil Cleanup Levels		
6 NYCRR Part 360	Solid Waste Management Facilities		
DOE / NYSERDA	Hazardous Waste Requirements		
42 U.S.C. 6961	Federal Facility Compliance Act		
RCRA 3008(h)	Administrative Order on Consent		
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<sup>&</sup>lt;sup>2</sup> NRC licensing and radiation protection, environmental safety and health, security, and management policies are applicable to activities conducted by NYSERDA for facilities at WNYNSC that are under the 10 CFR Part 50 license but outside the authority of the WVDP Act.

Regulation/Agency	Title/Application
	Air Quality
EPA	Clean Air Act/Air Quality Requirements
42 U.S.C. 7401 et seq.	Clean Air Act of 1970, as amended
40 CFR Parts 61 and 63	National Emission Standards for Hazardous Air Pollutants (NESHAPs)
40 CFR Part 50	National Primary and Secondary Ambient Air Quality Standards (NAAQS)
40 CFR Part 63	National Emission Standards for Hazardous Air Pollutants for Source Categories
New York State - NYSDEC	Clean Air Act/Air Quality Requirements
6 NYCRR Parts 200–317	Air Resources
TAGM 4031	Fugitive Dust Suppression and Particulate Monitoring at Inactive Hazardous Waste Sites
ECL 19-0101 et seq.	Air Pollution Control Act (New York)
	Water Quality
EPA/U.S. Army Corps of Engineers/Other Federal Agencies	Safe Drinking Water Act/Clean Water Act/Water Quality Requirements
40 CFR Parts 141–149	Safe Drinking Water Act – National Primary and Secondary Drinking Water Standards/Underground Injection Control/Sole-Source Aquifer Requirements
40 CFR Parts 110–122, 131	Clean Water Act – NPDES Permit/Water Quality Standards
33 CFR Parts 320–330	Clean Water Act – Dredge and Fill Permits
10 CFR Part 1022	Compliance with Floodplain/Wetland Environmental Review Requirements
10 CFR Part 1021	National Environmental Policy Act Implementing Procedures
Executive Order 11990	Protection of Wetlands
Executive Order 11988	Floodplain Management
New York State – NYSDEC/ U.S. Army Corps of Engineers	Safe Drinking Water Act/Clean Water Act/Water Quality Requirements
6 NYCRR Part 750	Obtaining a State Pollutant Discharge Elimination System Permit
6 NYCRR Part 608	Use and Protection of Surface Waters
6 NYCRR Part 663	Freshwater Wetlands Permit Requirements
6 NYCRR Parts 700–706	Surface Water and Groundwater Classifications and Standards
ECL 55-0101 et seq.	Sole-Source Aquifer Protection
6 NYCRR Part 663	Freshwater Wetlands
	Ecological Resources
U.S. Fish and Wildlife Service	
50 CFR Part 402	Interagency Cooperation – Endangered Species Act of 1973, as amended
16 U.S.C. 661–666e	Fish and Wildlife Coordination Act
16 U.S.C. 703 et seq.	Migratory Bird Treaty Act
16 U.S.C. 668–668d	Bald and Golden Eagle Protection Act
Executive Order 13112	Invasive Species
7 U.S.C. 136 et seq.	Endangered Species Act
New York State – NYSDEC	
6 NYCRR Part 182	Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern
ECL 11-0521	Requires Federal and state bird depredation permits if activities disturb/remove nests
6 NYCRR 193.3	Protected Native Plants

Regulation/Agency	Title/Application	
0 0 2	Cultural Resources	
EPA/Other Federal Agencies		
16 U.S.C. 469 et seq.	Archaeological and Historic Preservation Act	
42 U.S.C. 1996	American Indian Religious Freedom Act	
25 U.S.C. 3001	Native American Graves Protection and Repatriation Act	
36 CFR Part 800 et seq.	National Historic Preservation Act	
	Consultation with Seneca Nation of Indians	
	The Seneca Nation of Indians Cooperative Agreement	
Executive Order 13175	Consultation and Coordination with Indian Tribal Governments	
Executive Order 13007	Indian Sacred Sites	
Executive Order 11593	Protection and Enhancement of the Cultural Environment	
New York State – NYSDEC		
9 NYCRR Parts 426–428	The New York State Historic Preservation Act	
Land Use		
New York State		
Cattaraugus County Land Use Plan for the Year 2000	Encourage land use consistent with development policies	
	Pollution Prevention	
EPA/Other Federal Agencies		
42 U.S.C. 13101 et seq.	Pollution Prevention Act	
Executive Order 13423	Strengthening Federal Environmental, Energy, and Transportation Management	
Executive Order 12856	Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements	
	Environmental Justice	
Executive Order 12898	Environmental Justice	
Transportation		
U.S. Department of Transportat	ion	
49 U.S.C. 1801 et seq.	Hazardous Materials Transportation Act	
New York State		
6 NYCRR Part 372	Hazardous Waste Manifest System and Related Standards for Generators, Transporters, and Facilities	
6 NYCRR Part 381	Low-Level Radioactive Waste Transporter Permit and Manifest System	
	Public and Occupational Health	
EPA/Other Federal Agencies		
42 U.S.C. 9601	Comprehensive Environmental Response, Compensation and Liability Act	
42 U.S.C. 11001 et seq.	Emergency Planning and Community Right-to-Know Act	
Executive Order 11514 (40 CFR Parts 1500–1508)	Protection and Enhancement of Environmental Quality	
10 CFR Part 851	Worker Safety and Health Program	
Executive Order 13045	Protection of Children from Environmental Health Risks and Safety Risks	
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CFR = Code of Federal Regulations, ECL = Environmental Conservation Law, EPA = U.S. Environmental Protection Agency, FR = Federal Register, NPDES = National Pollutant Discharge Elimination System, NRC = U.S. Nuclear Regulatory Commission, NYCRR = New York Code of Rules and Regulations, NYSDEC = New York State Department of Environmental Conservation, NYSDOL = New York State Department of Labor, NYSERDA = New York State Energy Research and Development Authority, PCBs = polychlorinated biphenyls, RCRA = Resource Conservation and Recovery Act, TAGM = Technical Assistance and Guidance Memorandum, TSCA = Toxic Substances Control Act, U.S.C. = United States Code.

Table 5–2 Selected U.S. Department of Energy Orders and Policies Potentially Relevant to Activities at the Western New York Nuclear Service Center

Order	Title or Subject (date)
Oruei	Radiation
425.1C	Startup and Restart of Nuclear Facilities (03/13/03)
433.1	Maintenance Management Program for DOE Nuclear Facilities (06/01/01)
435.1	Radioactive Waste Management (07/09/99; Change 1, 08/28/01)
474.1A	Control and Accountability of Nuclear Materials (11/22/00)
5400.5	Radiation Protection of the Public and the Environment (02/08/90; Change 2, 01/07/93)
5530.3	Radiological Assistance Program (01/14/92; Change 1, 04/10/92)
5660.1B	Management of Nuclear Materials (05/26/94)
3000.1D	
151 1D	Environment, Safety, and Health
151.1B	Comprehensive Emergency Management System (10/29/03)
225.1A	Accident Investigations (11/26/97)
231.1 A	Environment, Safety, and Health Reporting (08/19/03; Change 1, 06/03/04)
414.1C	Quality Assurance (06/17/05)
420.1A	Facility Safety (05/20/02)
430.1B	Real Property Asset Management (09/24/03) – Addresses closure and decommissioning and decontamination of DOE facilities.
440.1A	Worker Protection Management for DOE Federal and Contractor Employees (03/27/98)
442.1A	Department of Energy Employee Concerns Program (06/06/01)
450.1A	Environmental Protection Program (06/04/08)
451.1B	National Environmental Policy Act Compliance Program (10/26/00; Change 1, 09/28/01)
5480.4	Environmental Protection, Safety, and Health Protection Standards (05/15/84; Change 4, 01/07/93)
	Security
142.2	Safeguards Agreement and Protocol with the International Atomic Energy Agency (01/7/04)
142.3	Unclassified Foreign Visits and Assignments (06/18/04)
470.1	Safeguards and Security Programs (09/28/95; Change 1, 05/21/96; Extended 05/11/06)
471.1A	Identification and Protection of Unclassified Controlled Nuclear Information; (06/30/00; Extended 07/07/06)
471.2A	Information Security Program (03/27/97; Extended 05/11/06)
471.4	Incidents of Security Concern (03/17/04)
472.1C	Personnel Security Activities (03/25/03)
473.1	Physical Protection Program (12/23/02)
	Transportation
460.1B	Packaging and Transportation Safety (04/04/03)
460.2A	Departmental Materials Transportation and Packaging Management (12/22/04)
	Other
470.2B	Independent Oversight and Performance Assurance Program (10/31/02)
1230.2	American Indian Tribal Government Policy (04/08/92)
5480.19	Conduct of Operations Requirements for DOE Facilities (07/09/90; Change 1, 05/18/92; Change 2, 10/23/01)