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 (WNYNSC) 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. This chapter identifies those Federal, State, and local laws, regulations, Orders, and requirements or policies relevant to this *Revised Draft 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 at the Vest Valley Demonstration Project and Vestern New York Nuclear Service Center (Decommissioning and/or Long-Term Stewardship LES).*

5.1 Background

The alternatives analyzed in this 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 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 WNYNSC are embodied in Federal and State environmental, safety, and health regulations 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 5.6.4 summarizes in tabular form a listing of the potentially applicable laws, regulations, and Orders discussed.

Section 5.2 addresses the applicable Federal environmental, safety, and health laws, regulations, and requirements for the WNYNSC. Section 5.3 discusses major 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 management activities. Section 5.6 discusses consultations with agencies and federally recognized Native 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 the WNYNSC (including the 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 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.

American Indian Religious Freedom Act of 1978 (42 United States Code [U.S.C.] 1996)—The American Indian Religious Freedom Act protects Native Americans' 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 the 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 and 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 having 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 NRC responsibility for licensing and regulating commercial uses of atomic energy and allows the NRC to establish dose and concentration limits for protection of workers and the public for activities under NRC 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 and through its series of Orders and associated standards and guidance (see Table 5–2 below). 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 the WNYNSC that are under the 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 *Code of Federal Regulations* and are enumerated as applicable in Table 5–1 below. NYSERDA's NRC license for the WNYNSC will become a factor when the WVDP is completed. The technical specifications and certain other portions of NYSERDA's NRC license are currently in abeyance pending the completion of the 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 waste and transuranic waste activities at WNYNSC. The Atomic Energy Act authorizes the NRC to enter into an agreement with a State, where 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.

Nuclear Regulatory Commission License Termination Rule (10 CFR Part 20, Subpart E)—The Atomic Energy Act of 1954 assigned NRC responsibility for licensing and regulating commercial uses of atomic energy. The NRC (and its predecessor the Atomic Energy Commission) fulfilled this responsibility at the 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 the completion of the WVDP, NRC maintained certain authorities under the WVDP Act that included prescribing decommissioning criteria for tanks where the high-level radioactive waste solidified under the project were stored, as well as the facilities, materials and hardware used in solidification activities. In support of determining the decommissioning criteria for the WVDP, the NRC published a draft policy statement for public comment in December 1999 (67 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 the WVDP. (See the discussion below for more detail on the NRC final decommissioning policy statement.) NYSERDA's NRC license for West Valley 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. 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 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 to the average member of the critical group will not exceed 25 millirem per year. Even if institutional controls fail, individual doses should not exceed 100 millirem per year TEDE. If it is demonstrated that the 100 millirem per year TEDE criterion is technically not achievable or prohibitively expensive in the event of failure of institutional controls, the individual dose criterion in the event of failure of institutional controls may be as high as 500 millirem per year TEDE. 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 dose criteria of up to 100 millirem per year TEDE 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 the WNYNSC would be established under NRC operating license CSF-1. Currently the technical specifications and certain other portions of the NYSERDA license are in abeyance pending completion of the WVDP.

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 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 in order 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 the 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 implementation phase of decommissioning the 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 the 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. Implementation activities would need to comply with Clean Water Act regulations relevant to wastewater, stormwater, and to 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.

The WNYNSC contains wetlands that could be affected by implementation 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 Frank's 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, condition, or deny all Federal permits or licenses that might result in a discharge to waters of the state, 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, the 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 the implementation phase.

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 10⁻⁴ to 10⁻⁶ 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 below.

NRC and EPA Memorandum of Understanding

The NRC and the 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 its 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 restricted release or alternate criteria for release of the site, 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. The 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 the 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 for an 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 has requirements for marking, labeling, placarding, providing emergency response information, and training of 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 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 the 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 to 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 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 for 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 are pursued. This law would be invoked if any activity at the 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 the WNYNSC.

Nuclear Waste Policy Act of 1982 (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 the EPA to set generally applicable environmental radiation standards based on the authority of the Atomic Energy Act and other laws; and requiring 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 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 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 wastes at disposal facilities operated by DOE that are not regulated by 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 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 (61 FR 24772; August 12, 1996) DOE established that local jurisdictions would be eligible for grants 4 years before the first shipment through State or Tribal lands.

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 as well as 10 CFR Part 851 sets forth environmental safety and health protection standards applicable to all DOE operations and its contractors, and requires that DOE and its contractors 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 the implementation.

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 facilities that treat or store large quantities of hazardous waste for more than 90 days, or dispose of hazardous waste at the facility. Groundwater monitoring is required of nearly all RCRA facilities; and 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 the WNYNSC. In March of 1992, a RCRA Section 3008(h) Administrative Order on Consent (discussed separately in more detail in this chapter) was issued by the EPA and NYSDEC to the DOE and NYSERDA, as respondents, requiring the implementation of the RCRA Corrective Action Program at the 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, a RCRA facility investigation (RFI) to determine if any release had occurred, and a Corrective Measures Study (CMS) 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, a RCRA Section 3008(h) Administrative Order on Consent was issued by the EPA and NYSDEC to the 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 the WNYNSC. It required RFIs of onsite SWMUs to determine if there had 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 RFI 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 CMS(s) to be performed, if necessary, to evaluate selection of remedial alternatives for some of the SWMUs at the 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 the 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 the WNYNSC. The maximum contaminant level for manmade beta and gamma emitters is based on a 4 millirem-per-year dose limit. This limit applies to community water systems, including any that might utilize waters from the West Valley Site.

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. The 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 the WNYNSC.

Sole Source Aquifer

The 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 the WVDP. If EPA review raises concerns that the project is not protective of groundwater quality or safe drinking water standards as applicable then the Agency can make specific recommendations or mandate additional pollution prevention requirements. Although New York State doesn't 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 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., polychlorinated biphenyls-contaminated capacitors or asbestos) or discovered during the implementation phase (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) amended by the Waste Isolation Pilot Plant Land Withdrawal Act Amendments (Public Law 104-201)—The Waste Isolation Pilot Plant Land Withdrawal Act withdrew land from the public domain for the purposes 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 that will be disposed of 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 West Valley 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 the WVDP to demonstrate technologies for solidifying liquid high-level radioactive waste at the WNYNSC. The Act assigns DOE responsibility for solidifying the high-level radioactive waste on site and transporting the solidified waste to a geologic repository for disposal. The Act also assigns DOE the responsibility to treat and dispose of low-level and/or transuranic waste generated during the solidification activities and decommission the WVDP facilities used as a part of the 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 the WVDP. NRC exercised this authority starting in 1999 by publishing a draft policy statement on decommissioning criteria for the WVDP. After 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 the WVDP. The final policy statement is discussed in more detail below. 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 the WVDP resulted in a Stipulation of Compromise Settlement discussed in more detail below.

NRC Final Decommissioning Policy Statement

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

The criteria of the License Termination Rule applies to the decommissioning of: (1) the highlevel radioactive waste tanks and other facilities in which high-level radioactive waste solidified under the WVDP was stored, (2) the facilities used in the solidification of the waste, and (3) any material and hardware used in connection with the 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 the WVDP, the NRC recognizes that the health and safety and cost-benefit 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 which demonstrates the 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 1996, the Coalition on West Valley Nuclear Waste and Radioactive Waste Campaign ("coalition") filed an action in the United States District Court for the Western District of New York challenging certain proposed actions of the DOE related to disposal of low-level radioactive waste generated from the solidification of the high-level waste activities at the WVDP. As a result of this action, the Coalition and the 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 postsolidification phase of the WVDP would include analysis of the disposal of Class A and Class B/C low-level 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, United States 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.

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 EIS has been prepared in accordance with all NEPA.

Executive Order 11593, Protection and Enhancement of the Cultural Environment (May 13, 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, other than emergencies, where the release is from any facility under the jurisdiction or control of Executive Departments and 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; 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 to sacred sites and to provide access to those sites to Native Americans for religious practices. The Order directs agencies to plan projects to provide protection of and access to sacred sites to the extent compatible with the project.

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 amended by Executive Order 13296, April 18, 2003)—This Order requires each Federal agency to make it a high priority to identify and assess environmental health risks 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 risks 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 the implementation phase, 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 and 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 recycle 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.

5.4 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 10 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: "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 at the end of this chapter lists the DOE Orders 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, where the NRC will discontinue and the State will assume regulatory authority over certain radioactive materials. The NYSDOH and the 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] 38) was transferred from NYSDOL 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 State-licensed Disposal Area (SDA) at the WNYNSC. NYSDOH now maintains authority over the radioactive materials license (originally issued by the NYSDOL) 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 the 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.¹ NYSDOH will ensure its responsibility for protection of the public health via participation with NYSDEC staffing reviewing and concurring with NYSDEC on any remedial actions.²

Under the New York Agreement State Program, the NYSDEC has jurisdiction over discharges of radioactive material to the environment, including releases to the air and water, and the disposal of radioactive wastes 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 materials 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 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 370-374 and 376). The New York State RCRA regulations apply to DOE and its contractors. The State-licensed sites and activities such as the SDA, however, are regulated under both NYSDEC radioactive materials as well as 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 resource, historic, and cultural values. 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 Sections 19-0101 *et seq.*)—New York State air quality regulations would be applicable to emission-producing activities during the implementation phase, 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." The WNYNSC holds a site-wide air permit issued by NYSDEC that could require modification to encompass emissions during the implementation phase.

¹ Regulators Communication Plan on application of Cleanup Requirements for Decommissioning the West Valley Site, Revision 1, May 20, 2003 (EPA et al. 2003).

Clean Water Act (New York State ECL 15 and 17, 6 NYCRR Parts 649-758)—The 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 in order to conform to the Clean Water Act and facilitate assumption of authority for the Federal NPDES program from the EPA to the NYSDEC. The primary mechanism to control water pollution is the requirement that direct dischargers obtain a NPDES permit, or in the case of States such as New York where the authority has been assumed from the EPA, a 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 the WNYNSC and is thus subject to these 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 Sections 9-1503, 11-0535 *et seq.*; 6 NYCRR Parts 182 and 193)—The NYSDEC Bureau of Wildlife has identified a 1,619-hectare (4,000-acre) area, including all of the WNYNSC, on the 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. Implementation activities potentially impacting confirmed state-listed, threatened and endangered plant species and the state critical habitat must be coordinated through the NYSDEC Bureau of Wildlife.

New York Freshwater Wetlands Act (ECL Section 24-0101 *et seq.*; **6 NYCRR Part 663)**—Six linked wetland areas identified on the southern portion of the 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 the WNYNSC, a permit would be required before certain activities within the wetland or its 30-meter- (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 Section 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.

Resource Conservation and Recovery Act as amended by the Hazardous and Solid Waste Amendments (ECL Article 27, Title 7 and 9; 6 NYCRR Parts 370 to 374, 376)—RCRA regulations are administered in New York State by the 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 RCRA Part 373 Permit Application to NYSDEC for review and processing.

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 the WNYNSC. In March of 1992 a RCRA Section 3008(h) Administrative Order on Consent was issued by the EPA and NYSDEC to DOE and NYSERDA, as respondents, requiring the 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 RFI to determine if any release had occurred, and when directed by NYSDEC, and a CMS to evaluate selection of remedial alternatives for SWMUs at the WNYNSC.

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

An SPDES permit from NYSDEC is required to discharge any pollutant to the waters of the State from an outlet or point source. The WNYNSC holds two SPDES permits; DOE was issued a permit for the WVDP, and a separate permit for the SDA was issued to NYSERDA.

Construction activities impacting 0.4 hectare (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, as well as preparation of a stormwater pollution prevention plan. An SPDES permit also would be necessary if a mobile wastewater treatment unit were to be used during implementation. An SPDES permit that includes provisions for long-term monitoring of surface water and surface water discharges could be required for the post-implementation phase under restricted use scenarios.

Stream Protection Act (ECL Section 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* are provided special protections.

Waste Transporter Permits (ECL Article 27, Title 3, 9, and 15; 6 NYCRR Parts 364, 372, and 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—The "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. Section 1536), the Fish and Wildlife Coordination Act (16 U.S.C. Section 661), and the National Historic Preservation Act (16 U.S.C. Section 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 relate 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 are concerned with the potential for disturbance of ancestral American Indian sites, the traditional practices of American Indians, and natural resources of importance to American Indians.

DOE has been in consultation with the appropriate Federal and State agencies and American Indian governments as required by other actions considered or taken at the West Valley Site in the past as identified below. However, for those specific actions associated with alternatives identified in this Draft EIS, the appropriate consultations are ongoing (see Appendix O). The status of those consultations initiated by the actions identified in this Revised Draft EIS will be reported in the Final EIS. The historical and expected consultations required under this EIS and the coordinating agencies, Indian governments, etc. are discussed below.

5.6.1 Ecological Resources Consultations

Although the consultation process for the specific actions identified in this Revised Draft EIS are ongoing (see Appendix O), previous assessments of ecological resources, including threatened and endangered species, have been conducted. In response to October 10, 2003, correspondence from DOE, the U.S. Fish and Wildlife Service sent a letter dated October 23, 2003, stating that, "Except for occasional transient individuals, no federally listed or proposed endangered or threatened species under our jurisdiction are known to exist in the project impact area. In addition, no habitat in the project impact area is currently designated or proposed "critical habitat" in accordance with provisions of the Endangered Species Act (16 U.S.C. 1531 et seq; 50 CFR Part 402.)." It was also indicated that, therefore, no further Endangered Species Act coordination or consultation with the U.S. Fish and Wildlife Service is required. Further, 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 WVDP.

The Federal and State permit and license, respectively, allows 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 the WVDP. The transport and spread of radiological contamination and asbestos poses potential human health and safety concerns and disrupts clean-up operations at the WVDP site.

With regards to wetlands, 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 based on a field visit conducted on November 2, 2005, and reviewing applicable topographic and wetland maps of the area, and a 2003 wetland delineation report (WVNS and URS 2004b). These wetlands were determined to be waters of the

United States and therefore are 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 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).

DOE is currently conducting consultations specifically related to potential actions identified in this EIS with the appropriate regional and field offices of the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and the equivalent state agencies. The consultations will solicit input on the potential for impacts on ecological resources, especially Federal threatened, endangered, and other species of concern or their critical habitat and/or state-protected species as well as wetlands. These consultations will be conducted in accordance with Section 7(a)-(d) of the Endangered Species Act of 1973 (16 U.S.C. Sections 1536(a)–(d)) and its implementing regulations under 50 CFR Part 402, "Interagency Cooperation-Endangered Species Act of 1973, as Amended," Protection of Wetlands (Executive Order 11990), and relevant state statutes and regulation. (See Appendix O for consultation letters).

The consultation process has been initiated by DOE through letters to the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, and equivalent State agencies. These letters have identified the potential actions and will be followed by a copy of this Revised Draft EIS. The ecological resources letter summarizes the preliminary analysis of the potential impacts on ecological resources, including any known Federal- or state-listed species. The letter has also requested that the consulted offices provide any available information on threatened and endangered animal and plant species (listed or proposed) and their habitats in the vicinity of the specific project areas. The wetlands letter will summarize the preliminary analysis of the potential impacts on wetlands. Each office has been asked to identify any other issues or concerns that should be considered in the Final EIS.

5.6.2 Cultural Resources Consultations

DOE has initiated consultation with the New York State Historic Preservation Officer through a formal letter, which identified the potential actions and provided supporting cultural resource information, and will be followed by this Revised Draft EIS. The consultation process conforms to 36 CFR Part 800 requirements for the management of archaeological and historic resources and properties and will be documented in the Final EIS, including copies of any formal correspondence. (See Appendix O for initial consultation letters.)

Various assessments of cultural resources have previously been conducted at the site. Previous consultations in 1995 with the New York State Historic Preservation Office indicated that facilities on the WVDP Premises are not eligible for inclusion in the National Register of Historic Places (Kuhn 1995).

The intent of the revisited consultation would be to determine potential eligibility for nomination to the *National Register of Historic Places* of archaeological and historic resources that may be associated with the proposed actions and alternatives. If required, further consultations would be used to determine the potential for adverse effect to any resources determined to be eligible for nomination and any necessary actions required to mitigate potential adverse effects.

5.6.3 American Indian Consultations

DOE has initiated a government-to-government consultation process specifically related to actions identified in this EIS with potentially affected federally recognized American Indian governments. A copy of this Revised Draft EIS will be submitted to each American Indian tribal government that has potential concern for resources at the site.

Communications have been ongoing between DOE and the Seneca Nation of Indians. 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 on issues related to West Valley.

In 2000, DOE and the Seneca Nation of Indians signed a Memorandum of Agreement for the shipment of West Valley spent nuclear fuel and high-level radioactive waste and foreign research reactor spent nuclear fuel across Seneca Nation 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 include:

- 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 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. 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 the WNYNSC on the Cattaraugus Creek environment.

The consultation process has been initiated by DOE through a formal letter to the Seneca Nation of Indians. The letter initially identified the potential actions and will be followed by a copy of this Revised Draft EIS. The initial letter requested a response regarding concerns under the American Indian Religious Freedom Act (Public Law 95-341) and the Native American Graves Protection and Repatriation Act (Public Law 101-601). Among the areas that may be of concern to the Seneca Nation of Indians are religious and sacred places and resources, Native American human remains, associated funerary objects, unassociated funerary objects, sacred objects, and cultural patrimony objects.

5.6.4 Summary Tables

As stated previously, Table 5–1 and 5–2 provide a listing of potentially applicable laws, regulations, Orders, and requirements in the previously discussed sections.

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

| 42 U.S.C. 2011 et seq. At 42 U.S.C. 2021 et seq. At 67 FR 5003 Fi Va Va 10 CFR Part 20 St 10 CFR Part 50 De | Title/Application Radiological /RC – Licensing/Permitting/Decommissioning Requirements ² .tomic Energy Act .tomic Energy Act .inal Policy Statement – Decommissioning Criteria for the WVDP (M-32) at the West 'alley Site .tomadards for Protection Against Radiation | |
|---|---|--|
| 42 U.S.C. 2011 et seq. At 42 U.S.C. 2021 et seq. At 67 FR 5003 Fi Va Va 10 CFR Part 20 St 10 CFR Part 50 De | RC – Licensing/Permitting/Decommissioning Requirements ² tomic Energy Act inal Policy Statement – Decommissioning Criteria for the WVDP (M-32) at the West 'alley Site | |
| 42 U.S.C. 2011 et seq. At 42 U.S.C. 2021 et seq. At 67 FR 5003 Fi Va Va 10 CFR Part 20 St 10 CFR Part 50 De | tomic Energy Act tomic Energy Act inal Policy Statement – Decommissioning Criteria for the WVDP (M-32) at the West Yalley Site | |
| 42 U.S.C. 2021 et seq. At 67 FR 5003 Fi Va Va 10 CFR Part 20 St 10 CFR Part 50 De | tomic Energy Act inal Policy Statement – Decommissioning Criteria for the WVDP (M-32) at the West Yalley Site | |
| 67 FR 5003 Fi Va Va 10 CFR Part 20 St 10 CFR Part 50 Detection | inal Policy Statement – Decommissioning Criteria for the WVDP (M-32) at the West Yalley Site | |
| Value Value 10 CFR Part 20 St 10 CFR Part 50 Detection | alley Site | |
| 10 CFR Part 50 De | tandards for Protection Against Radiation | |
| | | |
| 10 CFR Part 61 | omestic Licensing of Production and Utilization Facilities | |
| | icensing Requirements for Land Disposal of Radioactive Waste | |
| <i>New York State – NYSDEC and</i> En <i>NYSDOL</i> | nvironmental Conservation Rules and Regulations | |
| 6 NYCRR Part 380 Pr | revention and Control of Environmental Pollution by Radioactive Materials | |
| 6 NYCRR Part 381 Tr | ransporters of Low-Level Radioactive Waste | |
| | egulations for Low-Level Radioactive Waste Disposal Facilities and Financial Assurance equirements | |
| 12 NYCRR Part 38 Io | onizing Radiation Protection | |
| TAGM 4003 DS | SHM-RAD-05-01 | |
| DOE (10 CFR Chapter II) De | Department of Energy | |
| 10 CFR Part 820 Pr | rocedural Rules for DOE Nuclear Activities | |
| 10 CFR Part 830 No | uclear Safety Management | |
| 10 CFR Part 835 Oc | ccupational Radiation Protection | |
| 10 CFR Part 962 By | yproduct Material | |
| | ow-Level Radioactive Waste Policy Act of 1980, as amended. | |
| | S. Environmental Protection Agency – Radiation Protection Programs | |
| 40 CFR Part 191 Er | nvironmental Radiation Protection Standards for Management and Disposal of Spent Juclear Fuel, High-Level and Transuranic Radioactive Waste | |
| Solid, Hazardous, and Toxic Waste | | |
| EPA El | PA – Hazardous Waste Requirements | |
| 42 U.S.C. 6901 et seq. Re | esource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Vaste Amendments | |
| 40 CFR Parts 260 to 282 Ha | azardous Waste Management (RCRA) | |
| | CBs Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions (TSCA) | |
| | lazardous Waste Requirements | |
| | Vaste Transporter Permits | |
| | azardous Waste Management | |
| | andling and Storage of Petroleum | |
| | lugging and Abandonment | |
| | etermination of Soil Cleanup Levels | |
| | olid Waste Management Facilities | |
| | lazardous Waste Requirements | |
| | ederal Facility Compliance Act | |
| | dministrative Order on Consent | |

² NRC licensing, and radiation protection, environmental safety and health, security, and management policies are applicable to activities conducted by NYSERDA for facilities at the WNYNSC that are under the Part 50 license but outside[0] the authority of the WVDP Act.

Chapter 5 Applicable Laws, Regulations, and Other Requirements

| 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/Army Corps of Engineers Other Federal Agencies | Safe Drinking Water Act/Clean Water Act/Water Quality Requirements |
| 40 CFR Parts 141 to 149 | Safe Drinking Water Act – National Primary and Secondary Drinking Water Standards/Underground Injection Control/Sole-Source Aquifer Requirements |
| 40 CFR Parts 110 to 122, 131 | Clean Water Act - NPDES Permit/Water Quality Standards |
| 33 CFR Parts 320 to 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/ 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 | |
| 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 Part 193.3 | Protected Native Plants |

| Regulation/Agency | Title/Application | |
|--|--|--|
| | 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 to 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 Transportati | on | |
| 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 through 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 | |

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, NYSDEC = New York State Department of Environmental Conservation, NYSERDA = New York State Energy Research and Development Authority, NYSDOL = New York State Department of Labor, NYCRR = New York Code of Rules and Regulations, PCBs = polychlorinated biphenyls, RCRA = Resource Conservation and Recovery Act, TSCA = Toxic Substances Control Act, U.S.C. = United States Code, WVDP = West Valley Demonstration Project.

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

| Directive | Title or Subject (date) | | |
|---------------------------------|--|--|--|
| Radiation | | | |
| O 425.1C | Startup and Restart of Nuclear Facilities (03/13/03) | | |
| O 433.1 | Maintenance Management Program for DOE Nuclear Facilities (06/01/01) | | |
| O 435.1 | Radioactive Waste Management (07/09/99; Change 1, 08/28/01) | | |
| O 474.1A | Control and Accountability of Nuclear Materials (11/22/00) | | |
| O 5400.5 | Radiation Protection of the Public and the Environment (02/08/90; Change 2, 01/07/93) | | |
| O 5530.3 | Radiological Assistance Program (01/14/92; Change 1, 04/10/92) | | |
| O 5660.1B | Management of Nuclear Materials (05/26/94) | | |
| Environment, Safety, and Health | | | |
| O 151.1B | Comprehensive Emergency Management System (10/29/03) | | |
| O 225.1A | Accident Investigations (11/26/97) | | |
| O 231.1 A | Environment, Safety, and Health Reporting (08/19/03; Change 1, 06/03/04) | | |
| O 414.1C | Quality Assurance (06/17/05) | | |
| O 420.1A | Facility Safety (05/20/02) | | |
| 0 430.1B | Real Property Asset Management (09/24/03) – Addresses closure and decommissioning and decontamination of DOE facilities. | | |
| O 440.1A | Worker Protection Management for DOE Federal and Contractor Employees (03/27/98) | | |
| O 442.1A | Department of Energy Employee Concerns Program (06/06/01) | | |
| O 450.1A | Environmental Protection Program (06/04/08) | | |
| O 451.1B | National Environmental Policy Act Compliance Program (10/26/00, Change 1, 09/28/01) | | |
| O 5480.4 | Environmental Protection, Safety, and Health Protection Standards (05/15/84; Change 4, 01/07/93) | | |
| Security | | | |
| O 142.2 | Safeguards Agreement and Protocol with the International Atomic Energy Agency (01/7/04) | | |
| O 142.3 | Unclassified Foreign Visits and Assignments (06/18/04) | | |
| O 470.1 | Safeguards and Security Programs (09/28/95; Change 1, 05/21/96; Extended 05/11/06) | | |
| O 471.1A | Identification and Protection of Unclassified Controlled Nuclear Information; (06/30/00, Extended 07/07/06) | | |
| O 471.2A | Information Security Program (03/27/97, Extended 05/11/06) | | |
| O 471.4 | Incidents of Security Concern (03/17/04) | | |
| O 472.1C | Personnel Security Activities (03/25/03) | | |
| O 473.1 | Physical Protection Program (12/23/02) | | |
| Transportation | | | |
| O 460.1B | Packaging and Transportation Safety (04/04/03) | | |
| O 460.2A | Departmental Materials Transportation and Packaging Management (12/22/04) | | |
| Other | | | |
| O 1230.2 | American Indian Tribal Government Policy (04/08/92) | | |
| O 470.2B | Independent Oversight and Performance Assurance Program (10/31/02) | | |
| O 5480.19 | Conduct of Operations Requirements for DOE Facilities (07/09/90; Change 1, 05/18/92; Change 2, 10/23/01) | | |