

CHAPTER 5
APPLICABLE LAWS, REGULATIONS,
AND OTHER REQUIREMENTS

5.0 APPLICABLE LAWS, REGULATIONS, AND OTHER REQUIREMENTS

Chapter 5 presents the applicable laws, regulations, and other requirements that apply to the Proposed Action and alternatives. Federal laws and regulations are summarized in Section 5.3; Executive Orders in Section 5.4; U.S. Department of Energy (DOE) regulations and Orders in Section 5.5; and state environmental laws, regulations, and agreements in Section 5.6. Radioactive material packaging and transportation laws and regulations are discussed in Section 5.7. Emergency management and response laws, regulations, and Executive Orders are discussed in Section 5.8. Consultations with Federal, state, and local agencies and federally-recognized American Indian Nations are discussed in Section 5.9.

5.1 Introduction

As part of the National Environmental Policy Act (NEPA) process, an agency must consider whether an action could threaten a violation of any Federal, state, or local law or requirements (40 *Code of Federal Regulations* [CFR] 1508.27) or require a Federal permit, license, or other entitlements (40 CFR 1502.25). This chapter identifies and summarizes the major Federal, state, and local laws and environmental requirements, agreements, and permits that could be required to support the proposed consolidation of nuclear operations related to the production of radioisotope power systems (RPSs).

There are a number of Federal environmental laws that affect environmental protection, health, safety, compliance, and consultation at every DOE location. In addition, certain environmental requirements have been delegated to state authorities for enforcement and implementation. Furthermore, state legislatures have adopted laws to protect health and safety and the environment. It is DOE policy to conduct its operations in a manner that ensures the protection of public health, safety, and the environment through compliance with all applicable Federal and state laws, regulations, orders, and other requirements.

The various action alternatives analyzed in this *Environmental Impact Statement for the Proposed Consolidation of Nuclear Operations Related to Production of Radioisotope Power Systems (Consolidation EIS)* involve either the operation of existing DOE facilities or the construction and operation of new DOE facilities, and the transportation of materials. Actions required to comply with statutes, regulations, and other Federal and state requirements may depend on whether a facility is newly built (preoperational) or is incorporated in whole or in part into an existing facility. Requirements vary among alternatives and different states. The alternatives considered in this environmental impact statement (EIS) involve DOE facilities located in the States of Tennessee, New Mexico, and Idaho. Chapter 2 of this EIS provides a detailed discussion of the alternatives.

5.2 Background

Requirements governing the consolidation of RPS nuclear production operations arise primarily from six sources: Congress, Federal agencies, Executive Orders, legislatures of the affected states, state agencies, and local governments. In general, Federal statutes establish national policies, create broad legal requirements, and authorize Federal agencies to create regulations that conform to the statutes. Detailed implementation of these statutes is delegated to various Federal agencies such as DOE, the U.S. Department of Transportation (DOT), and the U.S. Environmental Protection Agency (EPA). For many environmental laws under EPA jurisdiction, state agencies may be delegated responsibility for the majority of program implementation activities, such as permitting and enforcement, but EPA usually retains oversight of the delegated program.

Some applicable laws such as NEPA, the Endangered Species Act, and the Emergency Planning and Community Right-To-Know Act require specific reports and/or consultations rather than ongoing permits or activities. These would be satisfied through the legal/regulatory process, including the preparation of the *Consolidation EIS*, leading to the consolidation of RPS nuclear production operations.

Other applicable laws establish general requirements that must be satisfied, but do not include processes (such as the issuance of permits or licenses) to consider compliance prior to specific instances of violations or other events that trigger their provisions. These include the Toxic Substances Control Act (affecting polychlorinated biphenyl transformers and other designated substances); the Federal Insecticide, Fungicide, and Rodenticide Act (affecting pesticide/herbicide applications); the Hazardous Materials Transportation Act; and (if there were to be a spill of a hazardous substance) the Comprehensive Environmental Response, Compensation, and Liability Act (Superfund).

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.

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 and water quality and for groundwater. State legislation may address solid waste management programs; locally rare or endangered species; and local resource, historic, and cultural values. The laws of local governments add a level of protection for the public, often focusing on zoning, utilities, and public health and safety concerns.

Regulatory agreements and compliance orders may also be initiated to establish responsibilities and timeframes for Federal facilities to come into compliance with provisions of applicable Federal and state laws. There are also other agreements, memoranda of understanding, or formalized arrangements that establish cooperative relationships and requirements.

The alternatives being considered for the consolidation of RPS nuclear production operations and materials are all within the States of Tennessee, New Mexico, and Idaho. Each of the alternatives is located on property controlled by DOE. For a broader review of environmental regulations and compliance issues at each site, the reader is referred to recent sitewide or programmatic EISs that include evaluations of activities at those sites.

DOE has authority to regulate some environmental activities, as well as the health and safety aspects of nuclear facilities operations. The Atomic Energy Act of 1954, as amended, is the principal authority for DOE regulatory activities not externally regulated by other Federal or state agencies. Regulation of DOE activities is primarily established through the use of DOE Orders and regulations.

External environmental laws, regulations, and Executive Orders can be categorized as applicable to either broad environmental planning and consultation requirements or regulatory environmental protection and compliance activities, although some requirements are applicable to both planning and operations compliance.

Section 5.3 of this chapter discusses the major applicable Federal laws and regulations that impose nuclear safety and environmental protection requirements on the subject facilities and might require the facilities to obtain a permit or license (or amendment thereof) prior to initiation of the consolidation project. Each of the applicable regulations and statutes establishes how activities are to be conducted or how potential releases of pollutants are to be controlled or monitored. They include requirements for the issuance of permits or licenses for new operations or new emission sources and for amendments to existing permits or licenses to allow new types of operations at existing sources.

Section 5.4 discusses applicable Executive Orders. Section 5.5 identifies applicable DOE regulations and Orders for compliance with the Atomic Energy Act, the Occupational Safety and Health Act, and other environmental, safety, and health requirements. Section 5.6 identifies state environmental laws, regulations, and agreements potentially affecting the consolidation of RPS nuclear production operations. Radioactive material packaging and transportation laws and regulations are discussed in Section 5.7. Section 5.8 discusses emergency management and response laws, regulations, and Executive Orders. Consultations with applicable agencies and federally-recognized American Indian Nations are discussed in Section 5.9.

5.3 Applicable Federal Laws and Regulations

This section describes the Federal environmental, safety, and health laws and regulations that could apply to the Proposed Action and alternatives.

National Environmental Policy Act of 1969, as amended (42 *United States Code* [U.S.C.] 4321 *et seq.*)—NEPA establishes a national policy promoting awareness of the environmental consequences of human activity on the environment and consideration of environmental impacts during the planning and decisionmaking stages of a project. It requires Federal agencies to prepare an EIS for major Federal actions with potentially significant environmental impacts on the human environment.

This EIS has been prepared in accordance with NEPA requirements, Council on Environmental Quality regulations (40 CFR 1500 *et seq.*), and DOE (10 CFR 1021, DOE Order 451.1B) provisions for implementing the procedural requirements of NEPA. It discusses reasonable alternatives and their potential environmental consequences.

Atomic Energy Act of 1954 (42 U.S.C. 2011 *et seq.*)—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. Through a series of DOE Orders, an extensive system of standards and requirements has been established to ensure safe operation of DOE facilities. DOE regulations are found in 10 CFR.

The Atomic Energy Act establishes regulatory control of the disposal of radioactive waste as well as production, possession, and use of three types of radioactive material: source, special nuclear, and byproduct materials. The Atomic Energy Act authorizes DOE to set radiation protection standards for itself and its contractors at DOE nuclear facilities and provides exclusions from U.S. Nuclear Regulatory Commission (NRC) licensing for defense production facilities.

The Atomic Energy Act authorizes DOE to establish standards that protect health and minimize danger to life and property from activities under DOE’s jurisdiction. DOE manages its facilities through regulations (set forth in 10 CFR 830) and issuance of DOE Orders and associated standards and guidance. Requirements for environmental protection, safety, and health are implemented at DOE sites primarily through contractual mechanisms that establish the applicable DOE requirements for management and operating contractors.

Nuclear safety regulations are found in the CFR. Several nuclear safety rules and environmental procedural rules are in effect (for example, 10 CFR 835, “Occupational Radiation Protection”), and more are in final stages of development. Nuclear safety regulations are effective under the schedule and implementing requirements of each rule, regardless of whether they are included in DOE contracts. DOE contractors are also required to comply with all applicable external laws and regulations, regardless of contract language.

Chapter 4 of this EIS discusses the application of DOE procedures to the management and control of radioactive waste for each alternative. Potential occupational radiation doses and doses to the general public would be well within DOE limits.

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 (42 U.S.C. 7418) requires that each Federal agency with jurisdiction over any property or facility engaged in any activity that might result in the discharge of air pollutants comply with “all Federal, state, interstate, and local requirements” with regard to the control and abatement of air pollution.

The Clean Air Act requires: (1) EPA to establish National Ambient Air Quality Standards as necessary to protect the public health, with an adequate margin of safety, from any known or anticipated adverse effects of a regulated pollutant (42 U.S.C. 7409 *et seq.*); (2) establishment of national standards of performance for new or modified stationary sources of atmospheric pollutants (42 U.S.C. 7411); (3) specific emission increases to be evaluated so as to prevent a significant deterioration in air quality (42 U.S.C. 7470 *et seq.*); and (4) specific standards for releases of hazardous air pollutants (including radionuclides) (42 U.S.C. 7412). These standards are implemented through implementation plans developed by each state with EPA approval. The Clean Air Act requires sources to meet standards and obtain permits to satisfy those standards.

Emissions of air pollutants are regulated by EPA under 40 CFR, Parts 50 through 99. Radionuclide emissions from DOE facilities are regulated under the National Emission Standards for Hazardous Air Pollutants Program under 40 CFR 61. Approval to construct a new facility or to modify an existing one may be required by these regulations under 40 CFR 61.07.

In compliance with state and Federal programs, the air quality impact analysis conducted for this EIS demonstrated that concentrations of air pollutants during the construction and operation of new RPS nuclear production facilities at Idaho National Laboratory (INL) would not exceed ambient air quality standards, nor contribute to unacceptable increases in pollutant levels. If new facilities were to be located in an area designated as nonattainment for an ambient standard or has a maintenance plan for continuing to meet ambient air quality standards, the Proposed Action would be subject to a Clean Air Act conformity review. A conformity review serves as a means to ensure that a Federal action does not hinder or interfere with programs developed by state and Federal agencies to bring the area into compliance with ambient air quality standards or to continue to meet ambient standards. As described in Section 3.1.5, INL is located in an attainment area for all criteria pollutants. Although construction and operations of new RPS nuclear production facilities would result in criteria pollutant emissions, a conformity review would not be necessary.

Chapter 4 of this EIS compares expected releases at each site with applicable standards. Some releases would result from construction activities. During operations, small releases would result during testing of emergency diesel generators and from other sources. At construction sites, it was found that the magnitude of the releases would not warrant a Prevention of Significant Deterioration analysis. Operations at existing facilities at the Oak Ridge National Laboratory (ORNL) in Tennessee and Los Alamos National Laboratory (LANL) in New Mexico would not exceed ambient air quality standards, nor contribute to unacceptable increases in pollutant levels.

Clean Water Act of 1972, as amended (33 U.S.C. 1251 *et seq.*)—The Clean Water Act, which amended the Federal Water Pollution Control Act, was enacted to “restore and maintain the chemical, physical, and biological integrity of the Nation’s water.” The Clean Water Act prohibits the “discharge of toxic pollutants in toxic amounts” to navigable waters of the United States. Section 313 of the Clean Water Act

requires all Branches of the Federal Government engaged in any activity that might result in a discharge or runoff of pollutants to surfacewaters to comply with Federal, state, interstate, and local requirements.

The Clean Water Act provides water quality standards for the Nation's waterways, guidelines and limitations for effluent discharges from point-source discharges, and the National Pollutant Discharge Elimination System (NPDES) permit program. The NPDES program is administered by EPA, pursuant to regulations in 40 CFR 122 *et seq.* Sections 401 through 405 of the Water Quality Act of 1987 added Section 402(p) to the Clean Water Act requiring that EPA establish regulations for permits for stormwater discharges associated with industrial activities. Stormwater provisions of the NPDES program are set forth at 40 CFR 122.26. Permit modifications are required if discharge effluent is altered. Section 404 of the Clean Water Act requires permits for the discharge of dredge or fill materials into navigable waters.

Chapter 3 of this EIS discusses existing wastewater treatment facilities and the NPDES status at each site. Chapter 4 of this EIS discusses management of wastewater during construction and operation for each alternative. Sanitary waste would be managed by use of portable toilet facilities during construction. During operation, sanitary wastes would be processed through existing facilities under all alternatives. It is anticipated that there would be no new discharges requiring a new NPDES permit at the Materials and Fuels Complex (MFC, formerly known as Argonne National Laboratory-West) at INL, the Radiochemical Engineering Development Center at ORNL, and the Plutonium Facility at LANL.

Safe Drinking Water Act of 1974, as amended (42 U.S.C. 300(f) *et seq.*)—The primary objective of the Safe Drinking Water Act is to protect the quality of public drinking water supplies and sources of drinking water. The implementing regulations, administered by EPA unless delegated to states, establish standards applicable to public water systems. These regulations include maximum contaminant levels (including those for radioactivity) in public water systems, which are defined as water systems that have at least 15 service connections used by year-round residents or regularly serve at least 25 year-round residents. The EPA regulations implementing the Safe Drinking Water Act are found at 40 CFR 100 through 149. For radioactive material, the regulations specify that the average annual concentration of manmade radionuclides in drinking water, as delivered to the user by such a system, shall not produce a dose equivalent to the total body or an internal organ greater than 4 millirem per year beta activity (40 CFR Section 141.16[a]). In December 2000, EPA issued revised maximum contaminant levels for radionuclides, effective December 2003 (65 *Federal Register* [FR] 76708). The new rule includes requirements for uranium. Other programs established by the Safe Drinking Water Act include the Sole Source Aquifer Program, the Wellhead Protection Program, and the Underground Injection Control Program.

Chapter 3 of this EIS discusses groundwater resources and current groundwater protection programs at each site. Chapter 4 of this EIS discusses protection of groundwater for each alternative. No alternative would involve a direct discharge to the surface or subsurface of sanitary or industrial effluent.

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 its activities, and that states are responsible for disposal of other low-level radioactive waste. It provides for and encourages interstate compacts to carry out state responsibilities.

Low-level radioactive waste is expected to be generated from activities conducted under each alternative.

Chapter 3 of this EIS discusses existing programs for management of low-level radioactive waste at each site. Chapter 4 of this EIS discusses the volume of low-level radioactive waste and its management for each alternative.

Nuclear Waste Policy Act of 1982, as amended (42 U.S.C. 10101, *et seq.*)—The Nuclear Waste Policy Act directed DOE to characterize and evaluate Yucca Mountain for suitability as a potential repository for disposal of commercial spent nuclear fuel and high-level radioactive waste. The act also directed the President to evaluate the need for a separate repository for high-level radioactive waste resulting from atomic energy defense activities. On April 30, 1985, President Reagan found “no basis to conclude that a defense only repository is required...” (DOE 1985). As a result of this finding, high-level radioactive waste from atomic energy defense activities may be disposed of in the proposed repository along with spent nuclear fuel. Therefore, high-level radioactive waste from the Hanford Site in Washington may be disposed of in the proposed repository. After passage by the House and Senate, on July 23, 2002, the President signed House Joint Resolution 87 approving the site at Yucca Mountain, Nevada, for the development of a repository for the disposal of high-level radioactive waste and spent nuclear fuel, pursuant to the Nuclear Waste Policy Act.

The Nuclear Waste Policy Act requires the NRC to consider and approve or disapprove an application (if DOE submits one) for authorization to construct a repository and for a license to receive and possess spent nuclear fuel and high-level radioactive waste in a repository. NRC promulgated 10 CFR 63, “Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada,” which contains the site-specific technical criteria for the licensing and operation of the proposed geologic repository at Yucca Mountain. DOE must demonstrate compliance with these standards prior to receiving the necessary licenses to store or dispose of radioactive materials in Yucca Mountain. The Nuclear Waste Policy Act (along with the Energy Policy Act) also provides authority for EPA to develop public health and safety standards for protection of the public from releases of radioactive material stored or disposed of at Yucca Mountain. EPA has promulgated these standards at 40 CFR 197, “Public Health and Environmental Radiation Protection Standards for Yucca Mountain, NV.” NRC incorporated these standards in 10 CFR 63. DOE is currently preparing a license application to construct a repository at Yucca Mountain. DOE will need to obtain a license to receive and possess spent nuclear fuel and high-level radioactive waste for Yucca Mountain prior to the shipment of high-level radioactive waste to Yucca Mountain.

Waste Isolation Pilot Plant Land Withdrawal Act, as amended (P.L. 102-579)—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 (TRU) waste. In addition to establishing the location for the facility, the Land Withdrawal Act also defines the characteristics and amount of waste that will be disposed of at the facility. The Amendments to the Waste Isolation Pilot Plant Land Withdrawal Act exempt waste designated by the Secretary of Energy for disposal at WIPP from the Resource Conservation and Recovery Act (RCRA) land disposal restrictions. However, these amendments do not exempt mixed TRU waste from other RCRA requirements. WIPP does have a RCRA permit and can accept mixed TRU waste. On May 15, 2003, EPA Region 6 approved DOE’s request to dispose of TRU and mixed TRU waste containing polychlorinated biphenyls at WIPP subject to certain “conditions of approval.” Currently, WIPP cannot accept remote-handled TRU waste, but DOE expects that WIPP will receive approval to accept remote-handled TRU waste by Fiscal Year 2006. Any mixed TRU or TRU waste sent to WIPP would have to comply with the waste acceptance criteria for WIPP.

Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 *et seq.*)—The Solid Waste Disposal Act of 1965, as amended, governs the transportation, treatment, storage, and disposal of hazardous and nonhazardous waste. Under the Resource Conservation and Recovery Act of 1976 (RCRA), that amended the Solid Waste Disposal Act of 1965, EPA defines and identifies hazardous waste; establishes standards for its transportation, treatment, storage, and disposal; and requires permits for persons engaged in hazardous waste activities. Section 3006 of RCRA (42 U.S.C. 6926) allows states

to establish and administer these permit programs with EPA approval. The EPA regulations implementing RCRA are found in 40 CFR, Parts 260 through 283.

Regulations imposed on a generator or on a treatment, storage, and/or disposal facility vary according to the type and quantity of material or waste generated, treated, stored, and/or disposed. The method of treatment, storage, and/or disposal also impacts the extent and complexity of the requirements.

Chapter 3 of this EIS provides information on the management of hazardous and mixed radioactive waste for each site. Chapter 4 of this EIS discusses the management of this waste for each alternative.

Federal Facility Compliance Act of 1992 (42 U.S.C. 6961 *et seq.*)—The Federal Facility Compliance Act, enacted on October 6, 1992, amended RCRA. Section 102(a)(3) of the Federal Facility Compliance Act waives sovereign immunity for Federal facilities from fines and penalties for violations of RCRA, state, interstate, and local hazardous and solid waste management requirements. This waiver was delayed for 3 years following enactment for violations of the land disposal restrictions on storage and prohibition (RCRA Section 3004(j)) involving mixed radioactive waste at DOE facilities. This legislation further delays the waiver of sovereign immunity beyond the 3-year period at a facility if DOE is in compliance with an approved plan for developing treatment capacity and technologies for mixed radioactive waste generated or stored at the facility, as well as a DOE Order requiring compliance with the plan.

The Waste Management sections of Chapters 3 and 4 of this EIS provide information on the generation and management of mixed radioactive waste and the site-specific Orders for each of the alternatives.

Pollution Prevention Act of 1990 (42 U.S.C. 13101 *et seq.*)—The Pollution Prevention Act establishes a national policy for waste management and pollution control. Source reduction is given first preference, followed by environmentally safe recycling, with disposal or releases to the environment as a last resort. In response to the policies established by the Pollution Prevention Act, DOE committed to participation in the Superfund Amendments and Reauthorization Act, Section 313, EPA 33/50 Pollution Prevention Program. The goal for facilities involved in compliance with Section 313 is to achieve a 33-percent reduction (from a 1993 baseline) in the release of 17 priority chemicals by 1997. On November 12, 1999, U.S. Secretary of Energy Bill Richardson issued 14 pollution prevention and energy efficiency goals for DOE. These goals were designed to build environmental accountability and stewardship into DOE's decisionmaking process. Under these goals, DOE will strive to minimize waste and maximize energy efficiency as measured by continuous cost-effective improvements in the use of materials and energy, using the years 2005 and 2010 as interim measurement points.

Radioactive, hazardous, and nonhazardous waste types may be generated from all the alternatives; if so, efforts would be made to minimize their generation. As discussed in the Waste Management sections of Chapter 3 of this EIS, waste minimization programs are in place at each site to reduce waste and to recycle where possible.

Toxic Substances Control Act of 1976 (15 U.S.C. 2601 *et seq.*)—The Toxic Substances Control Act provides EPA with the authority to require testing of chemical substances entering the environment and to regulate them as necessary. The law complements and expands existing toxic substance laws such as Section 112 of the Clean Air Act and Section 307 of the Clean Water Act. The Toxic Substances Control Act requires compliance with inventory reporting and chemical control provisions of the legislation to protect the public from the risks of exposure to chemicals. The Toxic Substances Control Act also imposes strict limitations on the use and disposal of polychlorinated biphenyls, chlorofluorocarbons, asbestos, dioxins, certain metal-working fluids, and hexavalent chromium.

Activities under each of the alternatives would need to be conducted in compliance with the Toxic Substances Control Act.

Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 *et seq.*)—This legislation regulates the use, registration, and disposal of several classes of pesticides to ensure they are applied in a manner that protects the public, workers, and the environment. Implementing regulations include recommended procedures for the disposal and storage of pesticides (40 CFR 165 [proposed regulation]) and worker protection standards (40 CFR 170).

Activities under each of the alternatives would need to be conducted in compliance with this Act.

National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 *et seq.*)—The National Historic Preservation Act provides that sites with significant national historic value be placed on the *National Register of Historic Places*, maintained by the Secretary of the Interior. The major provisions of the Act for DOE consideration are Sections 106 and 110. Both sections aim to ensure that historic properties are appropriately considered in planning Federal initiatives and actions. Section 106 is a specific, issue-related mandate to which Federal agencies must adhere. It is a reactive mechanism driven by a Federal action. Section 110, in contrast, sets out broad Federal agency responsibilities with respect to historic properties. It is a proactive mechanism with emphasis on ongoing management of historic preservation sites and activities at Federal facilities. No permits or certifications are required under the act.

Section 106 requires the head of any Federal agency having direct or indirect jurisdiction over a proposed Federal or federally-assisted undertaking to ensure compliance with the provisions of the Act. It compels Federal agencies to “take into account” the effect of their projects on historical and archaeological resources and to give the Advisory Council on Historic Preservation the opportunity to comment on such effects. Section 106 mandates consultation during Federal actions if the undertaking has the potential to affect a historic property. This consultation normally involves State and/or Tribal Historic Preservation Officers and may include other organizations and individuals such as local governments, American Indian tribes, and Native Hawaiian organizations. If an adverse effect is found, the consultation often ends with the execution of a memorandum of agreement that states how the adverse effect will be resolved.

The regulations implementing Section 106, found in 30 CFR 800, were revised on December 12, 2000 (65 FR 77697), and became effective January 11, 2001. This revision modified the process by which Federal agencies consider the effects of their undertakings on historic properties and provides the Advisory Council on Historic Preservation with a reasonable opportunity to comment with regard to such undertakings, as required by Section 106 of the National Historic Preservation Act. In promulgating the new regulations, the Council has sought to better balance the interests and concerns of various users of the Section 106 process, including Federal agencies, State Historic Preservation Officers, Tribal Historic Preservation Officers, American Indians and Native Hawaiians, industry, and the public.

Chapter 3 of this EIS describes cultural and paleontological resources at each site. Chapter 4 of this EIS discusses the potential impacts to those resources.

Antiquities Act of 1906, as amended (16 U.S.C. 431 to 433)—This act protects historic and prehistoric ruins, monuments, and antiquities, including paleontological resources, on federally-controlled lands from appropriation, excavation, injury, and destruction without permission.

Chapter 3 of this EIS describes cultural and paleontological resources at each site. Chapter 4 of this EIS discusses the potential impacts to those resources.

Archaeological and Historic Preservation Act of 1974, as amended (16 U.S.C. 469 to 469c)—This act protects sites that have historic or prehistoric importance.

Chapter 3 of this EIS describes cultural and paleontological resources at each site. Chapter 4 of this EIS discusses the potential impacts to those resources.

Archaeological and Resources Protection Act of 1979, as amended (16 U.S.C. 470 *et seq.*)—This 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 remain the property of the United States. The law requires that whenever any Federal agency finds that its activities may cause irreparable loss or destruction of significant scientific, prehistoric, or archaeological data, the agency must notify the U.S. Department of the Interior and may request that the Department undertake the recovery, protection, and preservation of such data. 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 the terms and conditions requested by the tribe or Federal agency.

Chapter 3 of this EIS describes cultural and paleontological resources at each site. Chapter 4 of this EIS discusses the potential impacts to those resources.

Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*)—The Endangered Species Act is intended to prevent the further decline of endangered and threatened species and to restore those species and their critical habitats. Section 7 of the Act requires Federal agencies having reason to believe that a prospective action may affect an endangered or threatened species or its critical habitat to consult with the U.S. Fish and Wildlife Service (USFWS) of the U.S. Department of the Interior or the National Marine Fisheries Service of the U.S. Department of Commerce to ensure that the action does not jeopardize the species or destroy its habitat (50 CFR 17). Despite reasonable and prudent measures to avoid or minimize such impacts, if the species or its habitat would be jeopardized by the action, a formal review process is specified.

Threatened or endangered species in the regions of each site have been identified and listed in Chapter 3 of this EIS. Chapter 4 of this EIS discusses the potential impact to these species.

Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703 *et seq.*)—The Migratory Bird Treaty Act, as amended, is intended to protect birds that have common migration patterns between the United States and Canada, Mexico, Japan, and Russia. It regulates the harvest of migratory birds by specifying conditions such as the mode of harvest, hunting seasons, and bag limits. The act stipulates that it is unlawful at any time, by any means, or in any manner, to “kill ... any migratory bird unless and except as permitted by regulation.” Although no permit for this project is required under the act, DOE is required to consult with the USFWS regarding impacts to migratory birds, and to avoid or minimize these effects in accordance with the USFWS Mitigation Policy. There is currently a split of authority between Federal courts as to whether this act applies to Federal agencies. Chapter 3 of this EIS identifies species known at each site. Chapter 4 of this EIS discusses impacts to ecological resources for each alternative.

Bald and Golden Eagle Protection Act of 1973, as amended (16 U.S.C. 668 through 668d)—The Bald and Golden Eagle Protection Act, as amended, makes it unlawful to take, pursue, molest, or disturb bald (American) and golden eagles, their nests, or their eggs anywhere in the United States (Section 668, 668c). A permit must be obtained from the U.S. Department of the Interior to relocate a nest that interferes with resource development or recovery operations.

The bald eagle occupies or uses portions of LANL and INL. Chapter 4 of this EIS discusses the impacts to ecological resources of each alternative.

Fish and Wildlife Coordination Act (16 U.S.C. 661 *et seq.*)—The Fish and Wildlife Coordination Act promotes more effectual planning and cooperation among Federal, state, public, and private agencies for the conservation and rehabilitation of the Nation’s fish and wildlife and authorizes the U.S. Department of the Interior to provide assistance. This act requires consultation with the USFWS on the possible effects on wildlife if there is construction, modification, or control of bodies of water in excess of 4 hectares (10 acres) in surface area.

Chapter 3 of this EIS describes the water resources at each site.

Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 *et seq.*)—The Farmland Protection Policy Act requires Federal agencies to consider prime or unique farmlands when planning major projects and programs on Federal lands. Federal agencies are required to use prime and unique farmland criteria developed by the U.S. Department of Agriculture's Soil Conservation Service. Under the Farmland Protection Policy Act, the Soil Conservation Service is authorized to maintain an inventory of prime and unique farmlands in the United States to identify the location and extent of rural lands important in the production of food, fiber, forage, and oilseed crops (7 CFR 657).

Chapter 3 of this EIS identifies agricultural activities at each site. No cultivated farming is reported at any of the sites evaluated in the EIS.

American Indian Religious Freedom Act of 1978 (42 U.S.C. 1996)—This act reaffirms American Indian religious freedom under the First Amendment and sets U.S. policy to protect and preserve the inherent and constitutional right of American Indians to believe, express, and exercise their traditional religions. The act requires that Federal actions avoid interfering with access to sacred locations and traditional resources that are integral to the practice of tribal religions.

Chapter 3 of this EIS describes Traditional Cultural Properties resources known to exist at each site. Chapter 4 of this EIS discusses the potential impacts to the Traditional Cultural Properties resources of each alternative.

Religious Freedom Restoration Act of 1993 (42 U.S.C. 2000(bb) *et seq.*)—This act prohibits the U.S. Government, including Federal Departments, from substantially burdening the exercise of religion unless the Government demonstrates a compelling Governmental interest, the action furthers a compelling Governmental interest, and the action is the least restrictive means of furthering that interest.

Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001)—This act establishes a means for American Indians to request the return or repatriation of human remains and other cultural items presently held by Federal agencies or federally-assisted museums or institutions. The act also contains provisions regarding the intentional excavation and removal of, inadvertent discovery of, and illegal trafficking in American Indian human remains and cultural items. Major actions under this law include: (a) establishing a review committee with monitoring and policymaking responsibilities; (b) developing regulations for repatriation, including procedures for identifying lineal descent or cultural affiliation needed for claims; (c) providing oversight of museum programs designed to meet the inventory requirements and deadlines of this law; and (d) developing procedures to handle unexpected discoveries of graves or grave goods during activities on Federal or tribal lands. All Federal agencies that manage land and/or are responsible for archaeological collections obtained from their lands or generated by their activities must comply with the Act. DOE managers of ground-disturbing activities on Federal and tribal lands should make themselves aware of the statutory provisions treating inadvertent discoveries of

American Indians remains and cultural objects. Regulations implementing the Act are found at 43 CFR 10.

Chapter 3 of this EIS describes American Indian resources known to exist at each site. Chapter 4 of this EIS discusses the potential impacts to American Indian resources of each alternative.

Occupational Safety and Health Act of 1970 (29 U.S.C. 651 *et seq.*)—The Occupational Safety and Health Act establishes standards for safe and healthful working conditions in places of employment throughout the United States. The Act is administered and enforced by the Occupational Safety and Health Administration (OSHA), a U.S. Department of Labor agency. Although OSHA and EPA both have a mandate to reduce exposure to toxic substances, OSHA’s jurisdiction is limited to safety and health conditions that exist in the workplace environment.

Under the Act, it is the duty of each employer to provide a workplace free of recognized hazards that are likely to cause death or serious physical harm. Employees have a duty to comply with the occupational safety and health standards and rules, regulations, and orders issued under the Act. OSHA regulations (29 CFR 1910) establish specific standards telling employers what must be done to achieve a safe and healthful working environment. Government agencies, including DOE, are not technically subject to OSHA regulations, but are required under 29 U.S.C. 668 to establish their own occupational safety and health programs for their places of employment consistent with OSHA standards. DOE emphasizes compliance with these regulations at its facilities and prescribes, through DOE Orders, the OSHA standards that contractors must meet, as applicable to their work at Government-owned, contractor-operated facilities (DOE Order 440.1A). DOE keeps and makes available the various records of minor illnesses, injuries, and work-related deaths as required by OSHA regulations.

Activities under all alternatives would be conducted in compliance with this act.

Noise Control Act of 1972, as amended (42 U.S.C. 4901 *et seq.*)—Section 4 of the Noise Control Act of 1972, as amended, directs all Federal agencies to carry out “to the fullest extent within their authority” programs within their jurisdictions in a manner that furthers a national policy of promoting an environment free from noise jeopardizing health and welfare.

DOE programs to promote control of noise at each site are discussed in Chapter 3 of this EIS. Chapter 4 of this EIS discusses the potential noise impact of each of the alternatives.

5.4 Applicable Executive Orders

Executive Order 11514 (Protection and Enhancement of Environmental Quality, March 5, 1970), as amended by Executive Order 11991 (May 24, 1977)—This Order 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 impacts so that the views of interested parties can be obtained. DOE has issued regulations (10 CFR 1021) and DOE Order 451.1B for compliance with this Executive Order.

As previously discussed in Section 5.3, this EIS has been prepared in accordance with NEPA requirements (specifically, 40 CFR 1500 through 1508, 10 CFR 1021, and DOE Order 451.1B).

Executive Order 11593 (National Historic Preservation, 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.

Chapter 3 of this EIS identifies historic resources at each site. Chapter 4 of this EIS discusses potential impacts to historic resources at each site.

Executive Order 11988 (Floodplain Management, May 24, 1977)—This Order (implemented by DOE in 10 CFR 1022) 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 be avoided to the extent practicable.

Chapter 3 of this EIS identifies the delineated floodplains at each site.

Executive Order 11990 (Protection of Wetlands, May 24, 1977)—This Order (implemented by DOE in 10 CFR 1022) requires Federal agencies to avoid any short- or long-term adverse impacts on wetlands wherever there is a practicable alternative. Each agency must also provide opportunity for early public review of any plans or proposals for new construction in wetlands.

Chapter 3 of this EIS identifies the wetlands at each site. Chapter 4 of this EIS discusses the measures to be taken to protect wetlands where applicable.

Executive Order 12088 (Federal Compliance with Pollution Control Standards, October 13, 1978, as amended by Executive Order 12580, Superfund Implementation, 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, Noise Control Act, Clean Water Act, Safe Drinking Water Act, Toxic Substances Control Act, and RCRA.

Activities under each alternative would need to comply with this Order.

Executive Order 12699, *Seismic Safety of Federal and Federally Assisted or Regulated New Building Construction* (January 5, 1990)—This Order requires Federal agencies to reduce risks to occupants of buildings owned, leased, or purchased by the Federal Government or buildings constructed with Federal assistance and to persons who would be affected by failures of Federal buildings in earthquakes; to improve the capability of existing Federal buildings to function during or after an earthquake; and to reduce earthquake losses of public buildings, all in a cost-effective manner. Each Federal agency responsible for the design and construction of a Federal building shall ensure that the building is designed and constructed in accordance with appropriate seismic design and construction standards.

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.

The Environmental Justice sections of Chapters 3 and 4 of this EIS provide information that demonstrates compliance with this Order.

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, 1996)—This Order requires: “In managing Federal lands, each executive branch agency with statutory or administrative responsibility for the management of Federal lands shall, to the extent practicable, permitted by law, and not clearly inconsistent with essential agency functions, (1) accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and (2) avoid adversely affecting the physical integrity of such sacred sites. Where appropriate, agencies shall maintain the confidentiality of sites.”

Chapter 3 of this EIS identifies American Indian resources at each site. Chapter 4 of this EIS discusses the potential impacts to American Indian resources. A cultural resource survey and Traditional Cultural Properties consultation, as necessary, would be conducted prior to any construction activity.

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)—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 13101 (Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, September 14, 1998)—This Order requires each Federal agency to incorporate waste prevention and recycling in its daily operations and to work to increase and expand markets for recovered materials. It also states that it is national policy to prefer pollution prevention, whenever feasible. Pollution that cannot be prevented should be recycled wherever possible; pollution that cannot be prevented or recycled should be treated in an environmentally safe manner. Disposal should be employed only as a last resort.

Activities under each alternative would need to comply with this Order.

Executive Order 13112 (Invasive Species, February 3, 1999)—This Order requires Federal agencies to prevent the introduction of invasive species, to provide for their control, and to minimize their economic, ecological, and human health impacts.

Activities under each alternative would need to comply with this Order.

Executive Order 13123 (Greening the Government through Efficient Energy Management, June 3, 1999)—This Order directs Federal agencies to improve energy management in order to save taxpayer dollars and reduce emissions that contribute to air pollution and global climate change.

Activities under each alternative would need to comply with this Order.

Executive Order 13148 (Greening the Government through Leadership in Environmental Management, April 21, 2000)—This Order sets new goals for pollution prevention, requires all Federal facilities to have an environmental management system, and requires compliance or environmental management system audits.

Activities under each alternative would need to comply with this Order.

Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments* (November 6, 2000)—This Order supplements the Executive Memorandum (dated April 29, 1994) entitled “Government-to-Government Relations with Native American Tribal Governments” and states that each Executive Department and agency shall consult, to the greatest extent practicable and to the

extent permitted by law, with tribal governments prior to taking actions that affect federally-recognized tribal governments. This Order also states that each Executive Department and agency shall assess the impact of Federal Government plans, projects, programs, and activities on tribal trust resources and assure that tribal government rights and concerns are considered during the development of such plans, projects, programs, and activities.

5.5 Applicable U.S. Department of Energy Regulations and Orders

The Atomic Energy Act of 1954, as amended, authorizes DOE to establish standards to protect health and/or minimize the dangers to life or property from activities under DOE's jurisdiction. Through a series of DOE Orders and regulations, an extensive system of standards and requirements has been established to ensure safe operation of DOE facilities.

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 820), "Nuclear Safety Management" (10 CFR 830), "Occupational Radiation Protection" (10 CFR 835), "Compliance with the National Environmental Policy Act" (10 CFR 1021), and "Compliance with Floodplains/Wetlands Environmental Review Requirements" (10 CFR 1022).

DOE Orders are issued in support of environmental, safety, and health programs. Many DOE Orders have been revised and reorganized to reduce duplication and eliminate obsolete provisions. The new DOE Directives System is organized by series, with each Order identified by three digits, and is intended to include all DOE Orders, policies, manuals, requirement documents, notices, and guides. Existing DOE Orders, that are identified by four digits, are expected to be revised and converted to the new DOE numbering system. The major DOE Orders pertaining to the alternatives of this EIS are listed in **Table 5-1**.

5.6 State Environmental Laws, Regulations, and Agreements

Certain environmental requirements, including some discussed in Section 5.3, have been delegated to state authorities for implementation and enforcement. It is DOE policy to conduct its operations in an environmentally safe manner that complies with all applicable laws, regulations, and standards, including state laws and regulations. A list of applicable state environmental laws, regulations, and agreements is provided in **Table 5-2**.

5.7 Radioactive Material Packaging and Transportation Regulations

Transportation of hazardous and radioactive materials and substances is governed by DOT and NRC. The Hazardous Material Transportation Act of 1975 (49 U.S.C. 5105 *et seq.*) requires DOT to prescribe uniform national regulations for transportation of hazardous materials (including radioactive materials). Most state and local regulations regarding such transportation that are not substantively the same as DOT regulations are preempted (i.e., rendered void) (49 U.S.C. 5125). This in effect allows state and local governments only to enforce the Federal regulations, not to change or expand upon them.

This program is administered by the DOT Research and Special Programs Administration, which coordinates its regulations with those of NRC (under the Atomic Energy Act) and EPA (under RCRA) when covering the same activities.

DOT regulations, are found in 49 CFR 171 through 178, and 49 CFR 383 through 397, contain requirements for identifying a material as hazardous or radioactive. These regulations interface with the

NRC regulations for identifying material, but DOT hazardous material regulations govern the hazard communication (e.g., marking, hazard labeling, vehicle placarding, emergency response telephone number) and shipping requirements.

Table 5–1 Applicable DOE Orders and Directives

<i>DOE Order/Number</i>	<i>Subject (date)</i>
Leadership/Management/Planning	
O 151.1B	Comprehensive Emergency Management System (10/29/03)
Information and Analysis	
O 231.1A	Environment, Safety, and Health Reporting (08/19/03; Change 1, 06/03/04)
Work Process	
O 413.3	Program and Project Management for the Acquisition of Capital Assets (10/13/00; Change 1, 01/03/05)
O 414.1B	Quality Assurance (04/29/04)
O 420.1A	Facility Safety (05/20/02)
O 425.1C	Startup and Restart of Nuclear Facilities (03/13/03)
O 430.1B	Real Property Asset Management (09/24/03)
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 440.1A	Worker Protection Management for DOE Federal and Contractor Employees (03/27/98)
O 450.1	Environmental Protection Program (01/15/03; Change 1, 01/24/05)
O 451.1B	National Environmental Policy Act Compliance Program (10/26/00; Change 1, 09/28/01)
O 460.1B	Packaging and Transportation Safety (04/04/03)
O 460.2A	Departmental Materials Transportation and Packaging Management (12/22/04)
O 461.1A	Packaging and Transfer or Transportation of Materials of National Security Interest (04/26/04)
O 470.1	Safeguards and Security Program (09/28/95; Change 1, 06/21/96)
O 470.2B	Independent Oversight and Performance Assurance Program (10/31/02)
O 473.2	Protective Force Program (06/30/00)
O 474.1A	Control and Accountability of Nuclear Materials (11/22/00)
External Relationships	
1230.2	American Indian Tribal Government Policy (04/08/92)
Environmental Quality and Impact	
5400.5	Radiation Protection of the Public and the Environment (02/08/90; Change 2, 01/07/93)
5480.4	Environmental Protection, Safety, and Health Protection Standards (05/15/84; Change 4, 01/07/93)
5480.19	Conduct of Operations Requirements for DOE Facilities (07/09/90; Change 1, 05/18/92; Change 2, 10/23/01)
5480.20A	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities (11/15/94; Change 1, 07/12/01)
5480.30	Nuclear Reactor Safety Design Criteria (01/19/93; Change 1, 03/14/01)
Emergency Preparedness	
5530.3	Radiological Assistance Program (01/14/92; Change 1, 04/10/92)
5530.5	Federal Radiological Monitoring and Assessment Center (07/10/92; Change 1, 12/02/92)
Office of National Nuclear Security Administration	
5660.1B	Management of Nuclear Materials (05/26/94)

Table 5–2 Applicable State Environmental Laws, Regulations, and Tribal Agreements

<i>Law/Regulation/Agreement</i>	<i>Citation</i>	<i>Requirements</i>
Idaho National Laboratory, Idaho		
Idaho Environmental Protection and Health Act	Idaho Code (IC), Title 39, Health and Safety, Chapter 1, Department of Health and Welfare, Sections 39-105	Provides for development of air pollution control permitting regulations.
Rules for the Control of Air Pollution in Idaho	Idaho Administrative Procedure Act (IDAPA) 58, Department of Environmental Quality, Title 1, Chapter 1 (58.01.01)	Enforces national ambient air quality standards.
Idaho Water Pollution Control Act	IC, Title 39, Chapter 36, Water Quality	Establishes a program to enhance and preserve the quality and value of water resources.
Water Quality Standards and Wastewater Treatment Requirements	IDAPA 58.01.02	Establishes water quality standards and wastewater treatment requirements.
Transportation of Hazardous Waste	IC, Title 18, Crimes and Punishment, Chapter 39, Highways and Bridges, Section 18-3905; IC, Title 49, Motor Vehicles, Chapter 22, Hazardous Materials/Hazardous Waste Transportation Enforcement	Regulates transportation of hazardous materials/hazardous waste on highways.
Idaho Hazardous Waste Management Act	IC, Title 39, Chapter 44, Hazardous Waste Management	Requires permit prior to construction or modification of a hazardous waste disposal facility.
Rules and Standards for Hazardous Waste	IDAPA 58.01.05	Requires permit prior to construction or modification of a hazardous waste disposal facility.
Various Acts Regarding Fish and Game	IC, Title 36, Fish and Game, Chapters 9, Protection of Fish, 11, Protection of Animals and Birds, and 24, Species Conservation	Requires consultation with responsible agency.
Endangered Species Act	IC, Title 67, State Government and State Affairs, Chapter 8, Executive and Administrative Officers, Section 67-818	Requires consultation with Department of Fish and Game.
Rules for Classification and Protection of Wildlife	IDAPA 13, Department of Fish and Game, 13.01.06	Requires consultation with Department of Fish and Game.
Idaho Historic Preservation Act	IC, Title 67, Chapter 46, Preservation of Historic Sites	Requires consultation with responsible local governing body.
Agreement in Principle Between the Shoshone-Bannock Tribes and DOE	December 10, 2002	Establishes understanding and commitment between the tribes and DOE.
Spent Fuel Settlement Agreement (also known as the Governor's Agreement)	October 17, 1995	Allows Idaho National Engineering and Environmental Laboratory (INEEL) (now INL) to receive spent nuclear fuel and mixed radioactive waste from offsite and establishes schedules for the treatment of existing high-level radioactive waste, TRU waste, and mixed radioactive waste, and the removal of spent nuclear fuel from the state. (This agreement is not applicable to the alternative because only new waste will be generated by the Proposed Action. This newly generated waste, if determined to be mixed radioactive waste, will be covered by the INL Site Treatment Plan.)

<i>Law/Regulation/Agreement</i>	<i>Citation</i>	<i>Requirements</i>
Idaho Site Treatment Plan and Consent Order for Federal Facility Compliance Plan	November 1, 1995 (issued to INEEL [now INL] and Argonne National Laboratory-West [now MFC])	Addresses compliance with the Federal Facility Compliance Act and mixed radioactive waste treatment issues by implementing the INL Site Treatment Plan.
Oak Ridge National Laboratory, Tennessee		
Tennessee Air Pollution Control Act	Tennessee (TN) Code, Title 68, Chapter 201 (Part 1)	Provides for permitting to construct, modify, or operate an air contaminant source.
Tennessee Air Pollution Control Regulations	TN Rule, Chapter 1200-3	Requires a permit to construct, modify, or operate an air contaminant source. Also sets fugitive dust requirements.
Tennessee Water Quality Control Act	TN Code, Title 69, Chapter 3	Provides authority to issue new or modify existing NPDES permits required for a water discharge source.
Tennessee Water Pollution Control Regulations	TN Rule, Chapter 1200-4	Requires a new or modification of an existing NPDES permit for a water discharge source.
Tennessee Hazardous Waste Management Act	TN Code, Title 68, Chapter 212 (Part 1)	Requires permit for any construction or modification of a hazardous waste facility.
Tennessee State Executive Order on Wetlands	TN State Wetlands Conservation Strategy	Provides guidance from the Governor's Interagency Wetlands Committee.
Tennessee Nongame and Endangered or Threatened Wildlife Species Conservation Act of 1974	TN Code, Title 70, Chapter 8 (Part 1)	Requires consultation with responsible agency.
Tennessee Department of Environmental Conservation Order	October 1, 1995	Requires DOE to comply with the Site Treatment Plan for the management and treatment of mixed radioactive waste.
Los Alamos National Laboratory, New Mexico		
New Mexico Air Quality Control Act	New Mexico Statutes Annotated (NMSA), Chapter 74, Environmental Improvement, Article 2, Air Pollution, and Implementing Regulations at New Mexico Administrative Code (NMAC) Title 20, Environmental Protection, Chapter 2, Air Quality	Establishes air quality standards and requires a permit prior to construction or modification of an air contaminant source. Also requires an operating permit for major producers of air pollutants and imposes emission standards for hazardous air pollutants.
New Mexico Radiation Protection Act	NMSA, Chapter 74, Article 3, Radiation Control	Establishes state requirements for worker protection.
New Mexico Water Quality Act	NMSA, Chapter 74, Article 6, Water Quality, and Implementing Regulations Found in NMAC, Title 20, Chapter 6, Water Quality	Establishes water quality standards and requires a permit prior to the construction or modification of a water discharge source.
New Mexico Groundwater Protection Act	NMSA, Chapter 74, Article 6B, Groundwater Protection	Establishes state standards for protection of groundwater from leaking underground storage tanks.
New Mexico Solid Waste Act	NMSA, Chapter 74, Article 9, Solid Waste Act, and Implementing Regulations Found in NMAC Title 20, Environmental Protection, Chapter 9, Solid Waste	Requires permit prior to construction or modification of a solid waste disposal facility.
New Mexico Hazardous Waste Act	NMSA, Chapter 74, Article 4, Hazardous Waste, and Implementing Regulations Found in NMAC Title 20, Environmental Protection, Chapter 4, Hazardous Waste	Requires a permit prior to construction or modification of a hazardous waste disposal facility.

Law/Regulation/Agreement	Citation	Requirements
New Mexico Hazardous Chemicals Information Act	NMSA, Chapter 74, Article 4E-1, Hazardous Chemicals Information	Implements the hazardous chemical information and toxic release reporting requirements of the Emergency Planning and Community Right-to-Know Act of 1986 (SARA Title III) for covered facilities.
New Mexico Wildlife Conservation Act	NMSA, Chapter 17, Game and Fish, Article 2, Hunting and Fishing Regulations, Part 3, Wildlife Conservation Act	Requires permit and coordination if a project could disturb habitat or otherwise affect threatened or endangered species.
New Mexico Raptor Protection Act	NMSA, Chapter 17, Article 2-14	Makes it unlawful to take, attempt to take, possess, trap, ensnare, injure, maim, or destroy any of the species of hawks, owls, and vultures.
New Mexico Endangered Plant Species Act	NMSA, Chapter 75, Miscellaneous Natural Resource Matters, Article 6, Endangered Plants	Requires coordination with the state.
Threatened and Endangered Species of New Mexico	NMAC, Title 19, Natural Resources and Wildlife, Chapter 33, Endangered and Threatened Species, 19.33.6.8	Establishes the list of threatened and endangered species.
Endangered Plant Species	NMAC, Title 19, Chapter 21, Endangered Plants	Establishes plant species list and rules for collection.
New Mexico Cultural Properties Act	NMSA, Chapter 18, Libraries and Museums, Article 6, Cultural Properties	Establishes State Historic Preservation Office and requirements to prepare an archaeological and historic survey and consult with the State Historic Preservation Office.
Environmental Oversight and Monitoring Agreement	Agreement in Principle Between DOE and the state of New Mexico, renewed October 1, 2000	Provides DOE support for state activities in environmental oversight, monitoring, access, and emergency response.
Pueblo Accords	DOE 1992 Cooperative Agreements with each of four Pueblos	Sets forth the government-to-government relationship between DOE and the four closest Pueblos.
Los Alamos County Noise Restrictions	Los Alamos County Code, Chapter 8.28	Imposes noise restrictions and makes provisions for exceedances.
New Mexico Hazardous Waste Act and New Mexico Solid Waste Act	Compliance Order on Consent March 1, 2005	Determine the nature and extent of releases of contaminants at or from LANL; identify and evaluate alternatives for corrective measures, including interim measures, to cleanup contaminants in the environment, and to prevent or mitigate the migration of contaminants at or from LANL; and implement corrective measures.

The NRC regulations applicable to radioactive materials transportation are found in 10 CFR 71. These regulations include detailed packaging design certification testing requirements. Complete documentation of design and safety analysis and the results of the required testing are submitted to NRC to certify the packaging for use. This certification testing involves the following components: heat, free drop onto an unyielding surface, immersion in water, puncture by dropping the package onto a steel bar, and gas tightness.

The transportation casks used to transport radioactive material are subject to numerous inspections and tests (10 CFR 71.87). These tests are designed to ensure that cask components are properly assembled and meet applicable safety requirements. Tests and inspections are clearly identified in the Safety Analysis Report for Packaging and/or the Certificate of Compliance for each cask. Casks are loaded and inspected by registered users in compliance with approved quality assurance programs. Operations

involving the casks are conducted in compliance with 10 CFR 71.91. Reports of defects or accidental mishandling are submitted to NRC.

Chapter 4 of this EIS discusses the potential transportation impacts of each alternative.

5.8 Emergency Management and Response Laws, Regulations, and Executive Orders

This section discusses the laws, regulations, and Executive Orders that address the protection of public health and worker safety and require the establishment of emergency plans. These laws, regulations, and Executive Orders relate to the operation of facilities, including DOE facilities, that engage directly or indirectly in the production of special nuclear material.

5.8.1 Federal Emergency Management and Response Laws

Emergency Planning and Community Right-to-Know Act of 1986 (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 355, 370, and 372. Under Subtitle A of this act, Federal facilities are required to provide various 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 Title III as a matter of DOE policy at its contractor-operated facilities.

Chapter 3 of this EIS describes emergency planning for INL, ORNL, and LANL. Each site has established an emergency management program that would be activated in the event of an accident. The program has been developed and maintained to ensure adequate response to most accident conditions and to provide response efforts for accidents not specifically considered. The emergency management plan includes emergency planning, training, preparedness, and response.

Chapter 4 of this EIS discusses the impacts of potential accidents for each alternative.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9604(I) (also known as “Superfund”)—This act provides authority for Federal and state governments to respond directly to hazardous substance incidents. The act requires reporting of spills, including radioactive spills, to the National Response Center.

It will be necessary to comply with this requirement for each alternative.

Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 (42 U.S.C. 5121)—This act, as amended, provides an orderly, continuing means of providing Federal Government assistance to state and local governments in managing their responsibilities to alleviate suffering and damage resulting from disasters. The President, in response to a state governor’s request, may declare an “emergency” or “major disaster” to provide Federal assistance under this act. The President, in Executive Order 12148, delegated all functions except those in Sections 301, 401, and 409 to the Director of the Federal Emergency Management Agency. The Act provides for the appointment of a Federal coordinating officer who will operate in the designated area with a state coordinating officer for the purpose of coordinating state and local disaster assistance efforts with those of the Federal Government.

Justice Assistance Act of 1984 (42 U.S.C. 3701-3799)—This act establishes Emergency Federal law enforcement assistance to state and local governments in responding to a law enforcement emergency. The Act defines the term “law enforcement emergency” as an uncommon situation that requires law enforcement, that is or threatens to become of serious or epidemic proportions, and with respect to which state and local resources are inadequate to protect the lives and property of citizens or to enforce the criminal law. Emergencies that are not of an ongoing or chronic nature (for example, the Mount Saint Helens volcanic eruption) are eligible for Federal law enforcement assistance including funds, equipment, training, intelligence information, and personnel.

Price-Anderson Act (42 U.S.C. 2210)—This act allows DOE to indemnify its contractors if the contract involves the risk of public liability from a nuclear incident.

5.8.2 Federal Emergency Management and Response Regulations

Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release (10 CFR 30.72, Schedule C)—This section of the regulations provides a list that is the basis for both the public and private sector to determine whether the radiological materials they handle must have an emergency response plan for unscheduled releases, and is one of the threshold criteria documents for DOE hazards assessments required by DOE Order 5500.3A, “Planning and Preparedness for Operational Emergencies.” The “Federal Radiological Emergency Response Plan,” dated November 1995, primarily discusses offsite Federal response in support of state and local governments with jurisdiction during a peacetime radiological emergency.

Chapter 3 of this EIS describes emergency preparedness at each site.

Occupational Safety and Health Administration Emergency Response, Hazardous Waste Operations, and Worker Right to Know (29 CFR 1910)—This regulation establishes OSHA requirements for employee safety in a variety of working environments. It addresses employee emergency and fire prevention plans (Section 1910.38), hazardous waste operations and emergency response (Section 1920.120), and hazards communication (Section 1910.1200) to make employees aware of the dangers they face from hazardous materials in their workplace. These regulations do not directly apply to Federal agencies. However, Section 19 of the Occupational Safety and Health Act (29 U.S.C. 668) requires all Federal agencies to have occupational safety programs “consistent” with Occupational Safety and Health Act standards.

Chapter 3 of this EIS describes DOE emergency response programs.

Emergency Management and Assistance (44 CFR Section 1.1)—This regulation contains the policies and procedures for the Federal Emergency Management Act, National Flood Insurance Program, Federal Crime Insurance Program, Fire Prevention and Control Program, Disaster Assistance Program, and Preparedness Program, including radiological planning and preparedness.

Hazardous Materials Tables and Communications, Emergency Response Information Requirements (49 CFR 172)—This regulation defines the regulatory requirements for marking, labeling, placarding, and documenting hazardous material shipments. The regulation also specifies the requirements for providing hazardous material information and training.

Chapter 4 of this EIS discusses transportation impacts for each alternative.

5.8.3 Emergency Response and Management Executive Orders

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 in the Department of Homeland Security. 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 12656 (Assignment of Emergency Preparedness Responsibilities, November 18, 1988)—This Order assigns emergency preparedness responsibilities to Federal Departments and agencies.

Executive Order 12938 (Proliferation of Weapons of Mass Destruction, November 14, 1994)—This Order states that the proliferation of nuclear, biological, and chemical weapons (“weapons of mass destruction”) and the means of delivering such weapons constitutes an unusual and extraordinary threat to the national security, foreign policy, and economy of the United States, and that a national emergency would be declared to deal with that threat.

5.9 Consultations with Agencies and Federally-Recognized American Indian Nations

Certain laws, such as the Endangered Species Act, the Fish and Wildlife Coordination Act, and the National Historic Preservation Act, require consultation and coordination by DOE with other governmental entities including other Federal agencies, state and local agencies, and federally-recognized American Indian Nations. 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 biotic resources, cultural resources, and American Indian rights.

The biotic 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 are concerned with the sovereign rights of tribal Nations pertaining to the potential for disturbance of ancestral American Indian sites and the traditional practices of American Indians.

DOE initiated the required consultations with the appropriate State Historic Preservation Officers, as required by NEPA and Section 106 of the National Historic Preservation Act; the USFWS, and the National Marine Fisheries Service, as required by the Endangered Species Act of 1973, the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act; and the appropriate state regulators, as required by state laws or regulations. DOE also initiated the required consultations with the appropriate American Indian tribal governments, as required by the Executive Memorandum (dated April 29, 1994) entitled “Government-to-Government Relations with Native American Tribal Governments” and DOE Order 1230.2, “American Indian Tribal Government Policy.” DOE will report the results of these consultations in the Final *Consolidation EIS*.