

Appendix D

Key Federal Laws and Regulations

The Office of Civilian Radioactive Waste Management (OCRWM) must comply with the requirements of the Nuclear Waste Policy Act (NWPA) and other laws. OCRWM must also comply with the regulations of other Federal agencies, including the Nuclear Regulatory Commission (NRC), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA), and with State laws and regulations. This appendix summarizes the most important Federal requirements. OCRWM's Program Plan presents a much fuller account of statutory requirements, as well as a history of the Program.

Key Federal Laws

The NWPA established basic policies to govern development of a Federal radioactive waste management system.

- **Development of geologic repositories.** The NWPA established a framework for siting, characterizing, constructing, operating and monitoring, and closing two permanent geologic repositories for disposal of spent nuclear fuel and high-level radioactive waste.
- **Storage.** It provided the authority for the Federal Government to contract for a limited amount of emergency Federal interim storage; that authority has expired. It also provided for development of a proposal to site and construct a monitored retrievable storage facility on a firm schedule.
- **Intergovernmental relations.** It established requirements for interactions between the Federal Government and States, local governments, and Native American Tribes.
- **Other Federal responsibilities.** It assigned other Federal agencies responsibility for facilitating the radioactive waste management mission. Most notably, it required that radioactive waste management facilities be licensed by the NRC.
- **Nuclear Waste Fund.** It provided for the owners and generators of radioactive materials to be disposed of in a repository to cover the costs of disposal, and it established a fund into which utilities operating nuclear reactors pay fees on electricity generated by those reactors and sold by them.
- **Office of Civilian Radioactive Waste Management.** It established OCRWM within the Department of Energy.

The Nuclear Waste Policy Amendments Act of 1987

This act retained the basic policies set forth in the 1982 NWPAA regarding Federal responsibilities, the Nuclear Waste Fund, and OCRWM. However, it significantly modified the original act.

- **Site characterization.** The Amendments Act directed DOE to characterize only the Yucca Mountain site in Nevada as a potential repository site and to postpone consideration of the need for a second repository until no sooner than 2007 and no later than 2010. It established a process that would lead to a determination by the Secretary of Energy on whether to recommend that the President approve Yucca Mountain for development as a geologic repository.
- **Monitored retrievable storage.** It subjected the siting, construction, and operation of a monitored retrievable storage facility to certain conditions that link the construction and operation of the facility to construction and licensing of a repository. It also prohibited siting it in a State in which a site has been approved for repository site characterization or repository construction.
- **State and Tribal involvement.** It provided financial incentives for States and Native American Tribes on whose land a repository or monitored retrievable storage facility is sited. It authorized States, Native American Tribes, and units of local government within whose jurisdictions a candidate site is located to designate onsite oversight representatives, and it provided that the reasonable expenses of those representatives be paid from the Nuclear Waste Fund.
- **Local government involvement.** It also authorized the Secretary to designate other units of local government as affected and, therefore, entitled them to exercise oversight of site characterization activities and to receive financial assistance to cover the costs of that oversight.
- **External oversight.** It increased external oversight of OCRWM's work by establishing the Nuclear Waste Technical Review Board.
- **Nuclear Waste Negotiator.** It established the Office of the Nuclear Waste Negotiator and directed the Negotiator to attempt to reach an agreement with a State or Native American Tribe willing to host a repository or monitored retrievable storage facility. These provisions have expired.

The Energy Policy Act of 1992

This act includes key elements of the National Energy Strategy proposed by the Administration in 1990. Section 801 of the act directed EPA to contract with the National Academy of Sciences (NAS) to provide "findings and recommendations on reasonable standards for protection of the public health and safety" that would govern the long-term performance of a high-level radioactive waste repository at the Yucca Mountain site. Within one year of receiving NAS recommendations, EPA was to promulgate public health and safety standards that "shall prescribe the maximum annual effective dose equivalent to the individual members of the public from releases to the accessible environment from radioactive materials stored or disposed of in the repository." NRC is also required to modify its technical requirements and criteria to be consistent with EPA standards.

Key Regulations

Federal regulations are published in the Code of Federal Regulations, which is divided into volumes organized by Title and Part. For example, 10 CFR 60 refers to Title 10, Code of Federal Regulations, Part 60.

10 CFR 2 (NRC) Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders. Specifies the licensing process and requires an electronic record-keeping system to preserve data needed for licensing.

10 CFR 50, Appendix B (NRC) Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants. Establishes quality assurance requirements.

10 CFR 63 (NRC) Disposal of High-Level Radioactive Wastes in a Proposed Geological Repository at Yucca Mountain. NRC promulgated the final 10 CFR Part 63 on November 2, 2001, in the *Federal Register* (66 FR 55733).

10 CFR 71 (NRC) Packaging and Transportation of Radioactive Material. Defines requirements for packaging and transporting spent nuclear fuel and high-level radioactive waste.

10 CFR 72 (NRC) Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste. Sets forth technical requirements for licensing private storage facilities to receive, transport, and store spent nuclear fuel, and outlines procedures for licensing DOE to receive, transport, and store spent nuclear fuel at a temporary facility.

10 CFR 73 (NRC) Physical Protection of Plants and Materials. Prescribes requirements for physical protection systems to protect against radiological sabotage of special nuclear materials.

10 CFR 74 (NRC) Material Control and Accounting of Special Nuclear Material. Establishes requirements for control and accounting of special nuclear material, including documentation of transfer of material.

10 CFR 75 (NRC) Safeguards on Nuclear Material—Implementation of US/IAEA Agreement. Establishes a system to implement the agreement between the United States and the International Atomic Energy Agency (IAEA) on the application of safeguards.

10 CFR 960 (DOE) General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories. Establishes guidelines to compare candidate sites; used as the basis for the 1988 Site Characterization Plan for the Yucca Mountain Site Characterization Project. In 1996, DOE issued proposed amendments to these rules. In 1999, DOE issued a revised proposal, which included site-specific guidelines for Yucca Mountain as 10 CFR 963.

10 CFR 961 (DOE) Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste. Outlines DOE's contract with utilities to receive, transport, and dispose of spent nuclear fuel and high-level waste.

10 CFR 963 (DOE) General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories; Yucca Mountain Site Suitability Guidelines. DOE's siting guidelines, which use a total system performance method to evaluate suitability of the Yucca Mountain site were published in the *Federal Register* on November 14, 2001 (66 FR 57298).

40 CFR 197 (EPA) Environmental Radiation Protection Standards for Yucca Mountain, Nevada, for site-specific health and safety standards. Establishes limits on doses received by individual members of the

public from repository releases and establishes standards for groundwater contamination and limits doses from releases from human intrusion. EPA finalized the standards and issued the final 40 CFR Part 197 in the *Federal Register* on June 13, 2001 (66 FR 32074).

40 CFR 191 (EPA) Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes. Originally issued in 1985 pursuant to the NWPA, the regulations were remanded in 1987. The disposal section does not apply to Yucca Mountain. Pursuant to Section 801 of the Energy Policy Act of 1992, the EPA has proposed a site-specific radiation protection standard applicable to the Yucca Mountain site.

49 CFR 171-179 (DOT) Hazardous Materials Regulations. Specifies DOT requirements for the transportation of radioactive materials.