§ 60.1

- 60.73 Reports of deficiencies.
- 60.74 Tests.
- 60.75 Inspections.
- 60.78 Material control and accounting records and reports.

Subpart E—Technical Criteria

- 60.101 Purpose and nature of findings.
- 60.102 Concepts.

PERFORMANCE OBJECTIVES

- 60.111 Performance of the geologic repository operations area through permanent closure.
- 60.112 Overall system performance objective for the geologic repository after permanent closure.
- 60.113 Performance of particular barriers after permanent closure.

LAND OWNERSHIP AND CONTROL

60.121 Requirements for ownership and control interests in land.

SITING CRITERIA

60.122 Siting criteria.

DESIGN CRITERIA FOR THE GEOLOGIC REPOSITORY OPERATIONS AREA

- 60.130 General considerations.
- 60.131 General design criteria for the geologic repository operations area.
- 60.132 Additional design criteria for surface facilities in the geologic repository operations area.
- 60.133 Additional design criteria for the underground facility.
- 60.134 Design of seals for shafts and boreholes.

DESIGN CRITERIA FOR THE WASTE PACKAGE

60.135 Criteria for the waste package and its components.

PRECLOSURE CONTROLLED AREA

60.136 Preclosure controlled area.

PERFORMANCE CONFIRMATION REQUIREMENTS

60.137 General requirements for performance confirmation.

Subpart F—Performance Confirmation **Program**

- 60.140 General requirements.
- 60.141 Confirmation of geotechnical and design parameters.
- 60.142 Design testing. 60.143 Monitoring and testing waste packages.

Subpart G—Quality Assurance

- 60.150 Scope.
- 60.151 Applicability.

60.152 Implementation.

Subpart H—Training and Certification of **Personnel**

- 60.160 General requirements.
- 60.161 Training and certification program.
- 60.162 Physical requirements.

Subpart I—Emergency Planning Criteria [Reserved]

Subpart J—Violations

60.181 Violations.

60.183 Criminal penalties.

AUTHORITY: Atomic Energy Act secs. 51, 53, 62, 63, 65, 81, 161, 182, 183, 223, 234 (42 U.S.C. $2071,\ 2073,\ 2092,\ 2093,\ 2095,\ 2111,\ 2201,\ 2232,\ 2233,$ 2273, 2282); Energy Reorganization Act secs. 201, 202, 206, 211, Pub. L. 95-601, sec. 10, as amended by Pub. L. 102-486, sec. 2902 (42 U.S.C. 5841, 5842, 5846, 5851); sec. 14, Pub. L. 95-601 (42 U.S.C. 2021a); National Environmental Policy Act sec. 102 (42 U.S.C. 4332); Nuclear Waste Policy Act secs. 114, 117, 121 (42 U.S.C. 10134, 10137, 10141); Government Paperwork Elimination Act sec. 1704 (44 U.S.C. 3504 note); Energy Policy Act of 2005, Pub. L. 109-58, 119 Stat. 594 (2005).

Source: 46 FR 13980, Feb. 25, 1981, unless otherwise noted.

Subpart A—General Provisions

§ 60.1 Purpose and scope.

This part prescribes rules governing the licensing (including issuance of a construction authorization) of the U.S. Department of Energy to receive and possess source, special nuclear, and byproduct material at a geologic repository operations area sited, constructed, or operated in accordance with the Nuclear Waste Policy Act of 1982, as amended. This part does not apply to any activity licensed under another part of this chapter. This part does not apply to the licensing of the U.S. Department of Energy to receive and possess source, special nuclear, and byproduct material at a geologic repository operations area sited, constructed, or operated at Yucca Mountain, Nevada, in accordance with the Nuclear Waste Policy Act of 1992, as amended, and the Energy Policy Act of 1992, subject to part 63 of this chapter. This part also gives notice to all persons who knowingly provide to any licensee,

applicant, contractor, or subcontractor, components, equipment, materials, or other goods or services, that relate to a licensee's or applicant's activities subject to this part, that they may be individually subject to NRC enforcement action for violation of §60.11.

[69 FR 2279, Jan. 14, 2004]

§ 60.2 Definitions.

As used in this part:

Accessible environment means:

- (1) The atmosphere;
- (2) The land surface;
- (3) Surface water;
- (4) Oceans; and
- (5) The portion of the lithosphere that is outside the postclosure controlled area.

Affected Indian Tribe means any Indian Tribe (1) within whose reservation boundaries a repository for high-level radioactive waste or spent fuel is proposed to be located; or (2) whose Federally defined possessory or usage rights to other lands outside of the reservation's boundaries arising out of Congressionally ratified treaties or other Federal law may be substantially and adversely affected by the locating of such a facility; Provided, That the Secretary of the Interior finds, upon the petition of the appropriate governmental officials of the Tribe, that such effects are both substantial and adverse to the Tribe.

Anticipated processes and events means those natural processes and events that are reasonably likely to occur during the period the intended performance objective must be achieved. To the extent reasonable in the light of the geologic record, it shall be assumed that those processes operating in the geologic setting during the Quaternary Period continue to operate but with the perturbations caused by the presence of emplaced radioactive waste superimposed thereon.

Barrier means any material or structure that prevents or substantially delays movement of water or radionuclides.

Candidate area means a geologic and hydrologic system within which a geologic repository may be located.

Commencement of construction means clearing of land, surface or subsurface excavation, or other substantial action that would adversely affect the environment of a site, but does not include changes desirable for the temporary use of the land for public recreational uses, site characterization activities, other preconstruction monitoring and investigation necessary to establish background information related to the suitability of a site or to the protection of environmental values, or procurement or manufacture of components of the geologic repository operations area.

Commission means the Nuclear Regulatory Commission or its duly authorized representatives.

Containment means the confinement of radioactive waste within a designated boundary.

Controlled area means a surface location, to be marked by suitable monuments, extending horizontally no more than 10 kilometers in any direction from the outer boundary of the underground facility, and the underlying subsurface, which area has been committed to use as a geologic repository and from which incompatible activities would be restricted following permanent closure.

Design bases means that information that identifies the specific functions to be performed by a structure, system, or component of a facility and the specific values or ranges of values chosen for controlling parameters as reference bounds for design. These values may be restraints derived from generally accepted "state-of-the-art" practices for achieving functional goals or requirements derived from analysis (based on calculation or experiments) of the effects of a postulated event under which a structure, system, or component must meet its functional goals. The values for controlling parameters for external events include:

- (1) Estimates of severe natural events to be used for deriving design bases that will be based on consideration of historical data on the associated parameters, physical data, or analysis of upper limits of the physical processes involved; and
- (2) Estimates of severe external maninduced events, to be used for deriving design bases, that will be based on